

NWO

From: [REDACTED] NWD
Sent: Sunday, April 17, 2011 10:19 PM
To: DLL-CENWD ALLSUPV
Subject: FW: StrongPoint - 2011 Flood Preparedness (UNCLASSIFIED)
Attachments: StrongPoint - 2011 Flood Preparedness.pdf

Classification: UNCLASSIFIED
Caveats: NONE

FYI

jim

Jim Hearn SES
Director Regional Business
Northwestern Division, USACE
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-----Original Message-----

From: Temple, Bo M MG HQ02
Sent: Sunday, April 17, 2011 6:29 PM
To: Temple, Bo M MG HQ02; DLL-Division Center TEC Commanders; DLL-Deputy Division Commanders; DLL-District & Battalion Commanders; DLL-HQ-Staff Principals; CDL-All-Public-Affairs-Personnel; CDL-FOA-SES; 'David.Fastabend@itt.com'; Colberg, Jorge R SPA
Cc: Van Antwerp, Robert L LTG HQ02; 'david.wingerd@gmail.com'; '4chinsup@cox.net'; 'alfredbranch@charter.net'; 'barryholliday@dredgingcontractors.org'; 'bberwick@verizon.net'; 'sontag72@hotmail.com'; 'dans117@yahoo.com'; 'allotts@netscape.net'; 'davidfbastian@hotmail.com'; 'DPHXCORPS@aol.com'; 'weyerdj@yahoo.com'; 'weyerdj@yahoo.com'; 'donaldburchett@bellsouth.net'; Dunn, Donald; 'dondressler@verizon.net'; 'elmerschwingen@comcast.net'; 'fnorcross@verizon.net'; 'sullivag@aol.com'; 'getabb@citlink.net'; 'gwhugs@gmail.com'; 'hkarbs@aol.com'; 'kohleralice@earthlink.net'; 'jack@bickley.org'; 'jblanchar@aol.com'; 'jim.hdbiker@gmail.com'; 'jlmcfaul@bellsouth.net'; 'leftyjim58@yahoo.com'; 'larryseals@hotmail.com'; 'jimwolcott@yahoo.com'; 'SmithJA3@state.gov'; 'jerry@com3consulting.com'; 'auditjet@earthlink.net'; 'bail6jo@comcast.net'; 'john.mcelree@us.army.mil'; 'joecobi@cs.com'; 'jzgreer@gmail.com'; 'judyvi@gmail.com'; 'mjgrazioli@yahoo.com'; 'corpsmith@aol.com'; 'straffon@aol.com'; 'paul.walker1945@gmail.com'; 'sheila.r.schmitz@worldnet.att.net'; 'nativecitygraphics@verizon.net'; 'bobmiller01@hotmail.com'; 'bobfite@verizon.net'; 'rltisdale@bellsouth.net'; 'bob.stout61@verizon.net'; 'chesi_b-h@msn.com'; 'weber@nhisa.com'; 'ryates@cinci.rr.com'; 'roybraden@msn.com'; 'wscottparker@yahoo.com'; 'kentucky_44@fuse.net'; 'arnoldejrr@aol.com'; 'dweinert1@comcast.net'; 'don.palladino@comcast.net'; 'ftg3mtv@aol.com'; 'gegallo@umd.edu'; 'bherndon@aocwins.com'; 'bgjimdonovan@earthlink.net'; 'joseph.oder1@us.army.mil'; 'ink1942@aol.com'; 'dhandle@comcast.net'; 'joder@gorlincompanies.com'; 'chinenp001@hawaii.rr.com'; 'hawkinss@abmc.gov'; 'bachusw@cox.net'; 'bdawson@brwnald.com'; 'edward.cardon@us.army.mil'; 'Carol_Ken_8@msn.com'; 'james.cheatham@dot.gov'; 'dsanford@aapa-ports.org'; 'dlbasham@bellsouth.net'; 'gedickey@jhu.edu'; 'johnson.haslinger@verizon.net'; 'dwight.beranek@gmail.com'; 'egibson21d@earthlink.net'; 'fred@caverandassociates.com'; 'gillc@si.edu'; 'hanson0731@aol.com'; 'bobheine@sbcglobal.net'; 'iah2nd@aol.com'; 'cjsoper57@cox.net'; 'jerrybarnes@ntelos.net'; 'j.joseph.tyler@gmail.com'; 'daniellojp@cdm.com'; 'ArthurEWilliams@comcast.net'; 'dchristman@uschamber.com'; 'crschroer@msn.com'; 'david.f.melcher@us.army.mil'; 'charles.e.dominy@iapws.com'; 'jrutherford5@kc.rr.com'; 'jballard@theravensgroup.com'; 'general@crosslink.net';

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Subject: StrongPoint - 2011 Flood Preparedness (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

USACE Leaders,

As in any natural disaster, public safety is the U.S. Army Corps of Engineers' first priority. Flooding is the most common, costly and deadly natural disaster in the United States each year. Spring flooding is already under way across portions of the United States and the National Oceanic and Atmospheric Administration (NOAA) is predicting the worst is yet to come with almost half the country at an above-average risk of flooding during the next few weeks. One of USACE's main missions is providing assistance when natural disasters or other emergencies strike. Emergency preparedness and response is primarily state and local responsibilities, but USACE is authorized to assist communities in pre-flood preparedness, during-flood and post-flood response.

Please share StrongPoint with your respective teams as it provides current information, key messages, and facts and figures for your use in answering questions and communicating with our many stakeholders and audiences about USACE's flood preparedness efforts. We hope you find this information useful. For those reading on mobile devices, the text is pasted below.

If you have comments or suggestions, please send them to Curry Graham, Director of USACE Public Affairs, at Curry.Graham@usace.army.mil or Kevin Ropp at Kevin.L.Ropp@usace.army.mil.

v/r

Temple

STRONGPOINT

U.S. Army Corps of Engineers

April 15, 2010

2011 Flood Preparedness

"For the third consecutive year, the stage is set for potential widespread, record flooding in the North Central United States. All the ingredients are in place for major flooding.... We're asking citizens to stay informed and be prepared."

—Jack Hayes, Director of the National Weather Service

Flooding is the most common, costly and deadly natural disaster in the United States each year. Spring flooding is already under way across portions of the United States and the National Oceanic and Atmospheric Administration (NOAA) is predicting the worst is yet to come with almost half the country at an above-average risk of flooding during the next few weeks. One of USACE's main missions is providing assistance when natural disasters or other emergencies strike. Emergency preparedness and response is primarily state and local responsibilities, but USACE is authorized to assist communities in pre-flood preparedness, during-flood and post-flood response.

Flood Control and Coastal Emergency Act (Public Law 84-99) Under the Flood Control and Coastal Emergencies Act, USACE has authority to conduct emergency management activities, including:

- * Preparedness: The law establishes an emergency fund to prepare for emergency response to natural disasters, flood fighting and rescue operations.
- * Response Activities: USACE may supplement state and local entities in flood fighting in urban and other nonagricultural areas under certain conditions. All flood fight efforts require a Project Cooperation Agreement signed by the public sponsor, which is required to remove all flood fight material after the flood has receded.
- * Rehabilitation: Rehabilitation or restoration to pre-disaster status of eligible flood protection systems at no cost to the federal system owner (20 percent cost to the eligible non-federal system owner). Systems considered eligible for rehabilitation assistance must be in the Rehabilitation and Inspection Program before the flood. Acceptable operations and maintenance by the public levee sponsor also are required. The Corps coordinates levee repairs with interested federal, state, and local agencies following a natural disaster where flood protection works are damaged. The fund also includes rehabilitation of flood damage risk reduction structures.

USACE Emergency Flood Fight Response

When a governor requests USACE assistance for emergency flood fighting, technical or direct assistance, the Corps undertakes the following activities:

- * Activates USACE Division and District Emergency Operation Centers (EOCs) and deploys Liaisons Officer(s) to the state, and possibly the National Weather Service and the U.S. Geological Survey EOCs.
- * In coordination with the state, deploys flood fighting materials and supplies such as sandbags, pumps, and expedient flood fight products to threatened communities to supplement local response.
- * Puts contracting processes in place to order additional flood fighting supplies and rent extra pumps as the situation warrants.
- * Pre-positions flood fighting supplies and equipment at key locations.
- * Deploys flood engineers to threatened communities as requested by the impacted state(s). These engineers provide assistance to the communities and direct USACE contractors in construction of temporary levees.

Key Messages

- * Public safety is the Corps of Engineers' first priority.
- * The U.S. Army Corps of Engineers works closely with communities and other federal agencies to prepare for the flood season. It is a collaborate effort.
- * During a flood fight, USACE usually provides communities with sandbags and technical assistance, loaning other materials and equipment, building emergency levees and hiring contractors.
- * No levee or flood protection system will completely eliminate the risk of flooding.

Facts & Figures

- * Ninety percent of natural disasters in the U.S. involve flooding; about 25 percent of flood insurance claims come from moderate-to low-risk areas.
- * USACE employees already are on the ground in the Upper Midwest and have awarded contracts totaling more than \$4 million to construct emergency levees and add material to existing ones in several communities in anticipation of possible flooding during the next few weeks.
- * Flood forecasts are available at www.weather.gov/water.

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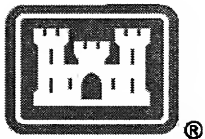
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[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Tuesday, April 19, 2011 12:47 PM
To: [REDACTED] NWD02
Subject: Re: System releases and mountain snowpack (UNCLASSIFIED)

I'll call you during my lunch hour.

Jody

----- Original Message -----

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Sent: Tue Apr 19 09:38:03 2011
Subject: System releases and mountain snowpack (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

We maintained our current schedule - 32.0 today and tomorrow and then up to 33.5 on Thursday - since reducing releases only lowered peak stages a couple inches. Kevin S. ran a scenario of reducing releases by 4 kcfs tomorrow (to allow for similar cut at FTRA today since GAPT elev is 1207.4 and climbing) and it reduced peak stages at NCNE, RUNE and STJ by 0.2'. Right now we're looking at exceeding flood stages at those locations by 1 to 1.5'. We did not believe that reducing 0.2' justified making the cut given ...

Don't Shoot the Messenger: Updating mountain snowpack, everything gained over the weekend. PRELIMINARY numbers are 131% of 15 Apr peak above FTPK and 128% of 15 Apr peak from FTPK to GARR. Approaching 1997 levels (131% and 137% in Apr and 135% and 136% in May). Sigh.

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]
[REDACTED] (fax)

-----Original Message-----

From: [REDACTED] NWD02
Sent: Tuesday, April 19, 2011 11:06 AM
To: Farhat, Jody S NWD02
Subject: System Releases (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Do you want to talk about the lower river forecast?

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]
[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

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Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Tuesday, April 19, 2011 11:38 AM
To: Farhat, Jody S NWD02
Cc: Swenson, Michael A NWD02
Subject: System releases and mountain snowpack (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED] (fax)

-----Original Message-----

From: [REDACTED] NWD02
Sent: Tuesday, April 19, 2011 11:06 AM
To: Farhat, Jody S NWD02
Subject: System Releases (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED] (fax)

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

NWO

From: [REDACTED] NWO
Sent: Tuesday, April 19, 2011 11:00 AM
To: [REDACTED] HQ02@NWO; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWD02; Bertino, John J Jr NWO; Blechinger, Erik T NWO; [REDACTED] NWO; [REDACTED] NWD02; DLL-CENWO-ED-H; Farhat, Jody S NWD02; Farmer, Monique L NWO; [REDACTED] NWO; [REDACTED] NWD02; [REDACTED] NWO; Jordano, James J LTC NWO; [REDACTED] NWD02; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO; Oldham, Margaret NWO; [REDACTED] NWO; Quinn, Kevin R NWO; [REDACTED] NWO; Ruch, Robert J COL NWO; Schenk, Kathryn M NWO; [REDACTED] NWD02; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWD02; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO; Wingert, Kevin M NWO
Subject: Omaha District Summary of Tributary Reservoir Regulation Activities 4.19.11 (UNCLASSIFIED)
Attachments: 4.19.11 TribResSumm.pdf; dailybull 4.19.11.pdf; SWE Map 4.18.11 Upper Milk River.jpg; Pipestem Pool Plot 4.19.11.pdf; Jamestown Pool Plot 4.19.11.pdf

Classification: UNCLASSIFIED

Caveats: NONE

Mountain snowpack on April 18, 2011 is 128% of the 30-year historical average. The Upper Missouri River is 125% of normal, the Upper Yellowstone is 128% of normal, the Upper North Platte is 142% of normal, and the South Platte is 121% of normal.

At the request of Fall River County, Cold Brook Reservoir is being lowered 3 feet to reduce the threat of flooding in the neighborhood along Cold Brook, north of Hot Springs. A deviation was approved by NWD on March 18, 2011. The drawdown is expected to be completed on April 23, 2011.

Jamestown and Pipestem Reservoir inflows continue to decline and are now approximately 4800 and 1200 cfs, respectively. Current pool elevations are 1447.4 ft msl at Jamestown and 1477.8 ft msl at Pipestem. Both reservoirs exceed the 2010 peak pool elevations. The forecasted Jamestown Reservoir peak pool remains at 1450 ft msl and Pipestem Reservoir also remains at 1479 ft msl. During the past week, releases have been gradually increased to the target flow of 1800 cfs at the James River at Jamestown stream gage. Current releases are 1200 cfs from Jamestown and 500 cfs from Pipestem.

If additional Jamestown Reservoir pool level forecasts are 1450 or below, releases are not expected to be more than 1200 cfs. There remains a potential for releases to be as high as 1700 cfs if significant rainfall occurs when reservoir pools are near peak levels. The design of levees will proceed with implementation of actual construction if there is a need to increase releases to 1700 cfs.

A public information meeting will be held Wednesday, April 20 at 7 pm in the Jamestown Senior High School theater.

For more detailed information, see the attached.

Please contact [REDACTED] ([REDACTED]) or [REDACTED] if you have any questions.

[REDACTED]
Hydraulic Engineer
Hydrologic Engineering Branch

US Army Corps of Engineers

phone: [REDACTED]

email: [REDACTED]@usace.army.mil

Classification: UNCLASSIFIED

Caveats: NONE

**Operational Summary
Omaha District Tributary Reservoirs
April 19, 2011**

**Water Control and Water Quality Section
Hydrologic Engineering Branch**

Detailed Summary

Mountain snowpack on April 18, 2011 is 128% of the 30-year historical average. The Upper Missouri River snow pack is currently 125% of normal and the Upper Yellowstone is 128% of normal. It appears the Upper Yellowstone snow water equivalent (SWE) crested at 25 inches and is now about 23 inches. The Upper North Platte Basin is 142% of normal (39 inches) and the South Platte Basin is 121% of normal. Plains snowpack on April 18, 2011 has snow water equivalents (SWEs) as high as 14 to 16 inches on the upper Milk River north of Harlem but may be less since the National Weather Service model has difficulty simulating snowmelt. The 8 inches of snow in the James River and Pipestem Creek basins that fell April 14 and 15 is mostly in place as evidenced by aerial photography taken April 17.

Omaha District Projects – Routine Activities

Bear Creek Reservoir.

Normal Operations. Bear Creek is releasing 11 cfs with the pool currently at elevation 5558.4 ft msl, slightly above the top of the multipurpose pool.

Bowman-Haley Dam and Reservoir, Bowman, ND

Nearly 1% of the flood control is occupied at elevation 2755.1 ft msl due to snow melt. It is in a fill and spill operation with the pool only 0.3 feet above the top of multipurpose. melted from the reservoir basin.

Bull Hook – Scott Coulee Dams.

Dry detention dams – no permanent storage.

Cedar Canyon Dam (Red Dale Gulch)

Dry detention dam – no permanent storage.

Chatfield Reservoir.

Normal operations. The multipurpose pool is 93% occupied with the reservoir at elevation 5430.6 ft msl, 1.4 feet below the top of the conservation pool. The release is currently 13 cfs for water rights.

Cherry Creek Reservoir.

Normal operations. The multipurpose pool is 90% occupied with the reservoir at elevation 5548.5 ft msl, 1.5 feet below the top of the conservation pool. The release is currently 21 cfs for water rights.

Cottonwood Springs Dam and Lake.

On March 31, an approximate pool elevation was taken at 3856 ft msl. The orifice line is out of the water. The pool has been coming up over the last year from its near record low. Top of conservation pool is 3875 ft msl.

Cold Brook Reservoir.

A drawdown of Cold Brook Reservoir has been initiated at the request of Fall River County to provide an additional 165 acre-feet of storage space in the reservoir to reduce the threat of flooding in the neighborhood along Cold Brook, north of Hot Springs. Currently, the pool elevation is 3583.3 ft msl, 1.7 feet below the top of the conservation pool. A deviation to draw the reservoir down 3 feet was approved on March 18, 2011. It is expected that the draw down will be completed on April 23, 2011 at which time the gate will be closed. It will be determined later this week whether to open the 8 inch bypass valve to pass inflow.

Kelly Road and Westerly Creek Dam

Dry detention dams – no permanent storage.

Papillion Creek Dam No. 11 – Cunningham Dam

The reservoir was drawn down 3 feet in October and November of 2010 for rehabilitation work along the shoreline. On February 28 the gate was closed and the reservoir has been slowly filling. Currently, the pool elevation is at 1120.8 ft msl, 98% of the conservation pool occupied.

Papillion Creek Dam No. 16 – Standing Bear Dam and Lake

Project is releasing 6 cfs in fill and spill operations.

Papillion Creek Dam No. 18 –Zorinsky Dam and Lake

Current drawdown elevation for zebra mussel control is 1091.7 ft msl, 18.3 feet below the conservation pool. A conference call with the Nebraska Game and Parks Commission and the City of Omaha was held March 29 and a possible option for rotenone application in June to kill remaining fish was discussed. If Veligers (young zebra mussels) are not present, the gate will be closed sometime in July. The Nebraska Game and Parks Commission agreed with this plan, but the City of Omaha continued to express concerns regarding safety issues, particularly if the lake is still down after school is out in the spring. The Corps has prepared a write-up describing the proposed procedures and timelines and has asked the City and Game and Parks for a response. The City has not provided a letter at this time. Until a letter is provided by the City, the Corps will continue with the current plan and keep the pool elevation drawn down.

Papillion Creek Dam No. 20 – Wehrspann Dam and Lake

Project is releasing 9 cfs in fill and spill operations.

Pipestem Dam and Lake

Jamestown Reservoir inflows continue to decline and are now at approximately 5,000 cfs. The forecasted Jamestown Reservoir peak pool level remains at 1450 feet msl. The forecasted peak pool level for Pipestem Reservoir also remains at 1479 feet msl.

During the past week, reservoir releases have been ramped up to the target flow of 1800 cfs at the James River at Jamestown stream gage. Currently, releases from Jamestown

Reservoir are at 1200 cfs and releases from Pipestem Reservoir are at 500 cfs. Including downstream runoff within the city of Jamestown, this results in a flow of approximately 1800 cfs at the James River stream gage in Jamestown.

If forecasted Jamestown Reservoir pool levels are 1450 or below, we do not expect Jamestown Reservoir releases to be above 1200 cfs. There is still a potential for releases of up to 1700 cfs from Jamestown Reservoir if significant rainfall occurs when reservoir pools are near peak levels. The Corps of Engineers and Bureau of Reclamation are working with the city of Jamestown and Stutsman County on contingency plans for emergency levees that would be needed if releases of 1700 cfs are required from Jamestown Reservoir. At this point, it is planned to only proceed with the design of the levees, and actual construction will only be implemented if there is a need to make the 1700 cfs release from Jamestown Reservoir.

Pipestem Reservoir is currently at 1477.6 feet msl and is rising at a rate of 0.6 feet per day. Jamestown Reservoir is currently at 1447.1 feet msl and is rising at a rate of 0.7 feet per day. Both reservoirs have now exceeded peak pool levels reached in 2010. In 2010 Pipestem Reservoir peaked on April 15 at a level of 1474.7 feet msl, 17.5 feet lower than the record of 1492.2 feet msl in April, 2009. In 2010 Jamestown Reservoir peaked on April 15 at a level of 1445.8 feet msl, 8.3 feet lower than the record of 1454.1 feet msl, also set in April, 2009.

A public information meeting has been scheduled for Wednesday, April 20 at 7 p.m. in the theater of the Jamestown Senior High School, 1509 10th Street NE.

Salt Creek Dam No. 2 – Olive Creek Dam and Lake
Project is releasing 0 cfs in fill and spill operations.

Salt Creek Dam No. 4 – Bluestem Dam and Lake
Project is releasing 0 cfs in fill and spill operations.

Salt Creek Dam No. 8 – Wagon Train Dam and Lake
Project is releasing 27 cfs in fill and spill operations.

Salt Creek Dam No. 9 – Stagecoach Dam and Lake
Project is releasing 3 cfs in fill and spill operations.

Salt Creek Dam No. 10 – Yankee Hill Dam and Lake
Project is releasing 0 cfs in fill and spill operations.

Salt Creek Dam No. 12 – Conestoga Dam and Lake
Project is releasing 2 cfs in fill and spill operations.

Salt Creek Dam No. 13 – Twin Lakes Dam and Lake
Project is releasing 0 cfs in fill and spill operations.

Salt Creek Dam No. 14 – Pawnee Dam and Lake
Project is releasing 0 cfs in fill and spill operations.

Salt Creek Dam No. 17 – Antelope Creek Dam and Holmes Park Lake
Project is releasing 3 cfs in fill and spill operations.

Salt Creek Dam No. 18 – Branched Oak Dam and Lake
Project is releasing 18 cfs in fill and spill operations.

Spring Creek Dam and Lake Pocasse
Subimpoundment of Lake Oahe. Pool level is normally at or near elevation 1617 ft msl. Currently, the pool elevation is 1618.3 and dropping 0.1 feet per day. The gate is fully open and releasing water into Lake Oahe. Snowmelt inflow was observed in March and April resulted in a peak pool elevation near 1620 ft msl on April 7. No concerns are reported unless the pool gets to elevation 1625 ft msl.

Snake Creek Dam and Lake Audubon.
Subimpoundment of Lake Sakakawea (Garrison Dam). The USBR regulates the pool level with their pumping plant.

Bureau of Reclamation Projects

Tiber Dam and Lake Elwell.

The pool is currently at elevation 2985.5 ft msl and has remained at that elevation since early April. The Water Control Plan for Flood Control stipulates that the reservoir be drawn down to a target elevation of 2976 ft msl by the end of February. However, in many years the USBR has requested not to lower the pool as much due to the below normal snowpack in the mountains. This request benefits recreation, fishery and hydropower interests.

Canyon Ferry Reservoir.

The pool is currently near elevation 3780.7 feet msl and is being drawn down for the upcoming runoff season. Although there is currently no requirement to evacuate joint use storage for flood control purposes the USBR typically targets some elevation near the base of the joint use pool, elevation 3783 feet, msl, sometime prior to the spring runoff season.

Clark Canyon Reservoir.

The pool elevation is at 5544.1 feet msl and climbing. This is 2 feet below the top of the joint use pool. The current inflow is estimated at approximately 322 cfs and the current release is 298 cfs.

Yellowtail Dam.

The pool is currently near elevation 3622.2 ft msl with 79% of the multipurpose pool occupied. The USBR is dropping the pool slightly to hold the forecasted spring runoff.

Glendo Reservoir.

The pool is near elevation 4625.5 ft msl with 80% of the multipurpose pool occupied. The USBR typically stores winter and spring flows in an attempt to reach the base of the flood control pool (4635 ft msl) prior to the beginning of irrigation season in the summer. Over the past few weeks, the North Platte River System has evacuated storage in preparation for high inflows due to an above normal snow pack in the Upper North Platte and Laramie River Basins. Katie Seefus attended a USBR public meeting in Scottsbluff NE on Monday, April 4 to become better acquainted with their regulation staff and to discuss current forecasts. The USBR April 1 system inflow forecast for the period of April through July is 162,000 AF above the 2010 actual system inflow and is 733,000 AF above the 30 year average.

Jamestown Reservoir.

The current pool elevation is 1447.4 ft msl, 58% of the flood control pool occupied, and releases are 1200 cfs. Inflows crested at 14,000 cfs on April 16 and are currently 4800 cfs. The reservoir is forecasted to crest near elevation 1450 ft msl. A public meeting is scheduled April 20 in Jamestown, ND to discuss this year's operations.

Boysen Reservoir.

The pool level is 4715.2 ft msl, 1.8 feet below the base of the joint use pool (4717 ft msl). Prior to the spring runoff season the USBR will generally lower the pool to some elevation below the base of the joint use pool.

Heart Butte Dam and Reservoir (Lake Tschida).

The pool level is 2067.3 ft msl or 2.9 feet above the base of the flood control pool which has 7% of the flood pool occupied. Inflows from snowmelt have lowered from 4500 cfs to 5320 cfs and releases have been reduced from 3300 cfs to 1285 cfs in fill and spill operations.

Keyhole Dam and Reservoir.

The pool level is elevation 4092.9 ft msl, nearly 6 feet below the base of the conservation pool. It has received some inflow this spring; current inflows are 183 cfs with a release of 0 cfs.

Pactola Dam and Reservoir.

The pool is near elevation 4578.3 ft msl and slightly rising. This is 1.9 feet below the base of the flood control pool, 4580.2 feet, msl.

Shadehill Dam and Reservoir.

The pool is 2272.3 ft msl with 1% of the flood control pool occupied. Inflows are 318 cfs with a release of 497 cfs. The USBR is concerned about erosion along the shoreline while the reservoir is in the flood pool. They are preparing a contract to place rip-rap in these concerned areas this summer. With the recent warmer temperatures inflows have come up slightly, but it appears most of the snow is gone from the basin.



US Army Corps
of Engineers
Omaha District

U.S. Army Corps of Engineers, Omaha District

Missouri River Basin

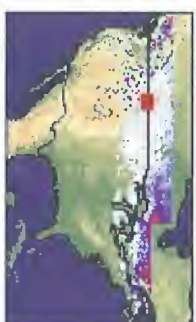
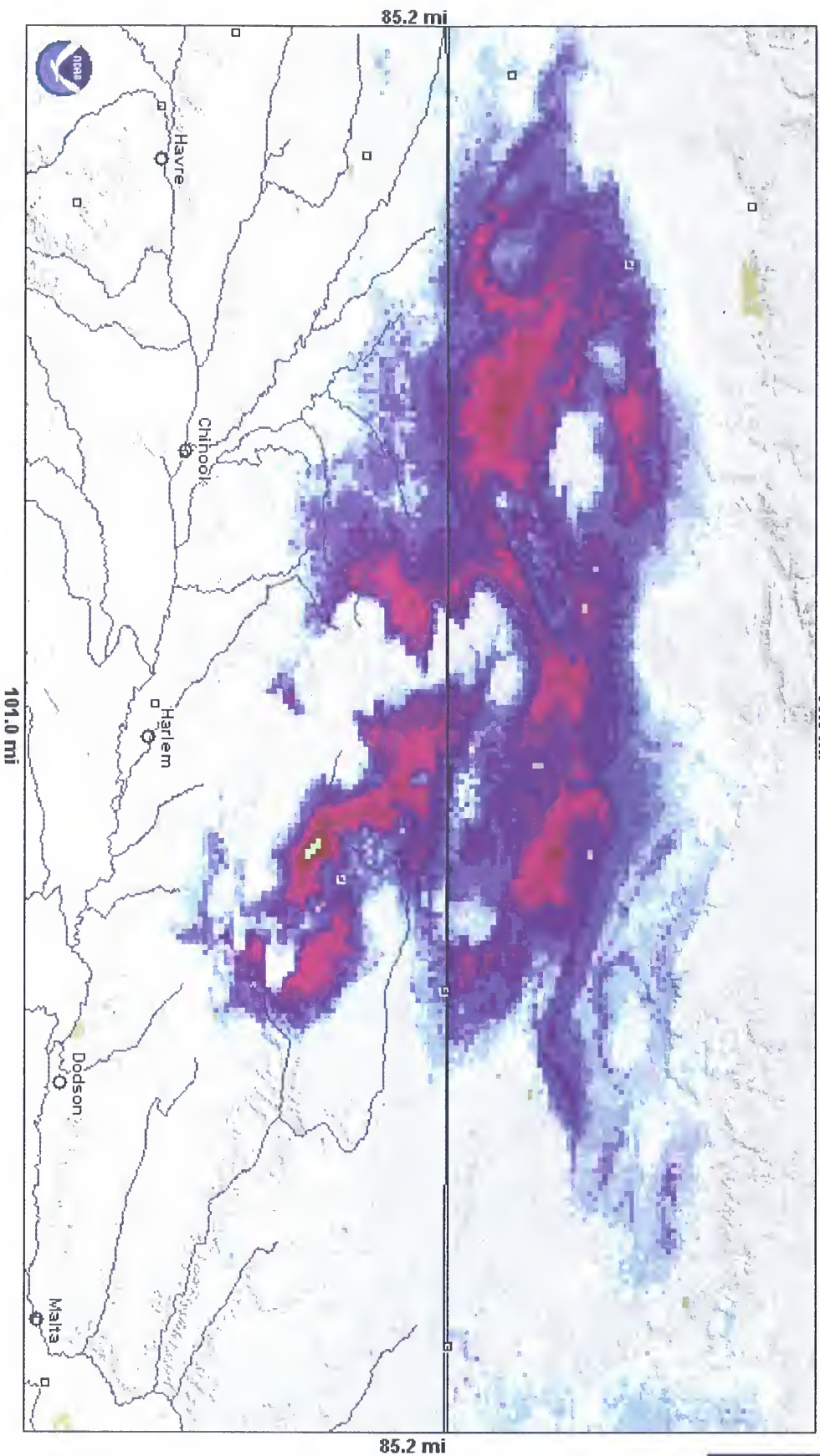
Mainstem and Tributary Reservoir Bulletin

Project Data Date/Time: 04/19/11 12:00 AM

Bulletin Updated: 4/19/11 10:15 AM

Project	Project Information				Current Data					Occupied Storage		
	Elevations (ft msl)		Storage		Elevation (ft msl)	Dly Elev. Change	Storage (ac-ft)	Inflow (dsf)	Release (dsf)	MP (%)	FC (ac-ft)	FC (%)
	MP	FC	MP	FC								
MRR - Missouri River Mainstem Projects												
*Please note Mainstem and USBR data is calculated manually and will populate before 12:00 p.m.												
Fort Peck	2234.0	2250.0	14,995,684	18,687,731	2239.96	0.04	16,091,000	13,000	7,400	100.0	1,095,316	29.7
Garrison	1837.5	1854.0	18,109,625	23,820,730	1844.89	0.19	20,524,000	52,000	14,900	100.0	2,414,375	42.3
Oahe	1607.5	1620.0	18,834,035	23,136,960	1616.70	-0.03	21,923,000	38,000	38,400	100.0	3,088,965	71.8
Big Bend	1420.0	1423.0	1,621,484	1,798,614	1420.50	0.16	1,649,000	38,000	33,500	100.0	27,516	15.5
Fort Randall	1350.0	1375.0	3,124,368	5,418,186	1358.73	0.31	3,855,000	42,000	26,500	100.0	730,632	31.9
Gavins Point	1204.5	1210.0	320,971	469,928	1207.31	0.26	375,000	36,000	32,000	100.0	54,029	36.3
System Totals							64,417,000					
NWO - USBR Section 7 Projects												
Tiber	2993.0	3012.5	925,649	1,328,723	2985.48	-0.02	798,723	908	1,061	86.3	0	0.0
Clark Canyon	5546.1	5560.4	174,367	253,442	5544.13	0.01	164,260	322	298	94.2	0	0.0
Canyon Ferry	3797.0	3800.0	1,891,888	1,992,977	3780.80	0.06	1,381,016	5,338	5,483	73.0	0	0.0
Boysen	4725.0	4732.2	741,594	892,226	4715.24	-0.10	569,168	425	1,208	76.7	0	0.0
Buffalo Bill	5393.5	5393.5	646,565	646,565	5357.26	-0.60	382,406	553	2,487	59.1	-	-
Yellowtail	3640.0	3657.0	1,070,000	1,328,000	3622.17	-0.36	845,608	4,528	5,934	79.0	0	0.0
Jamestown	1429.8	1454.0	31,510	221,000	1447.44	0.66	142,251	4,786	1,206	100.0	110,741	58.4
Heart Butte	2064.4	2094.5	67,000	214,000	2067.31	-0.42	76,722	532	1,285	100.0	9,722	6.6
Keyhole	4099.3	4111.5	194,000	334,000	4092.86	0.05	134,958	183	0	69.6	0	0.0
Pactola	4580.2	4621.5	56,000	99,000	4578.30	0.11	54,335	105	59	97.0	0	0.0
Shadehill	2271.9	2302.0	120,000	350,000	2272.25	-0.07	121,384	318	497	100.0	1,384	0.6
Glendo	4635.0	4653.0	518,000	790,000	4625.53	0.20	411,750	5,495	4,452	79.5	0	0.0
NWO - USACE Tributary Projects												
Bowman-Haley	2754.8	2777.0	18,765	91,482	2755.05	-0.06	19,187	-18	23	100.0	422	0.6
Pipestem	1442.5	1496.3	8,944	142,107	1477.83	0.49	73,733	1,234	511	100.0	64,789	48.7
Chatfield	5432.0	5500.0	27,428	234,207	5430.63	0.00	25,497	16	13	93.0	0	0.0
Cherry Creek	5550.0	5598.0	12,805	133,134	5548.50	0.02	11,554	19	21	90.2	0	0.0
Bear Creek	5558.0	5635.5	1,882	30,586	5558.40	0.03	1,924	12	11	100.0	42	0.1
Papio #11	1121.0	1142.0	3,054	16,907	1120.80	0.06	2,980	11	0	97.6	0	0.0
Papio #16	1104.0	1121.0	1,211	4,782	1104.46	-0.05	1,270	3	6	100.0	59	1.6
Papio #18	1110.0	1128.2	2,916	10,512	1091.74	0.00	236	1	1	8.1	0	0.0
Papio #20	1095.8	1113.1	2,536	8,611	1096.34	-0.04	2,663	3	9	100.0	127	2.1
Cottonwood	3875.0	3936.0	655	8,385	ORIFICE LINE OUT OF WATER							
Cold Brook	3585.0	3651.4	520	7,200	3583.01	-0.31	449	-5	0	86.4	0	0.0
Lake Audubon	1847.0	1847.0	323,690	323,690	1845.43	0	INFLOW AND OUTFLOW NOT CALCULATED					
Lake Pocasse	1617.0	1617.0	11,000	11,000	POOL ELEVATION READ MONTHLY BY PROJECT OFFICE							
Salt Creek #02	1335.0	1350.0	1,100	4,957	1332.97	-0.01	796	-1	0	72.3	0	0.0
Salt Creek #04	1307.4	1322.5	2,531	9,660	1305.95	0.01	2,102	1	0	83.1	0	0.0
Salt Creek #08	1287.8	1302.0	1,780	8,375	1288.00	0.00	1,830	7	7	100.0	50	0.8
Salt Creek #09	1271.1	1285.0	1,451	5,864	1271.35	-0.01	1,500	2	3	100.0	49	1.1
Salt Creek #10	1244.9	1262.0	1,629	7,468	1244.61	-0.01	1,569	-1	0	96.3	0	0.0
Salt Creek #12	1232.9	1252.0	1,808	9,415	1233.15	-0.01	1,861	0	2	100.0	53	0.7
Salt Creek #13	1341.0	1355.0	2,161	7,182	1340.98	-0.02	2,155	-3	0	99.7	0	0.0
Salt Creek #14	1244.3	1263.5	7,500	27,597	1244.45	-0.03	7,607	-11	0	100.0	107	0.5
Salt Creek #17	1242.4	1266.0	783	6,628	1242.70	0.00	845	3	3	100.0	62	1.1
Salt Creek #18	1284.0	1311.0	25,088	96,759	1284.33	-0.02	25,699	-1	18	100.0	611	0.9

Modeled Snow Water Equivalent (Shallow-snow Legend) forecasted for 2011 April 18, 16:00 Z [Experimental]

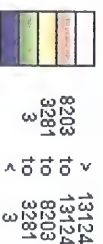


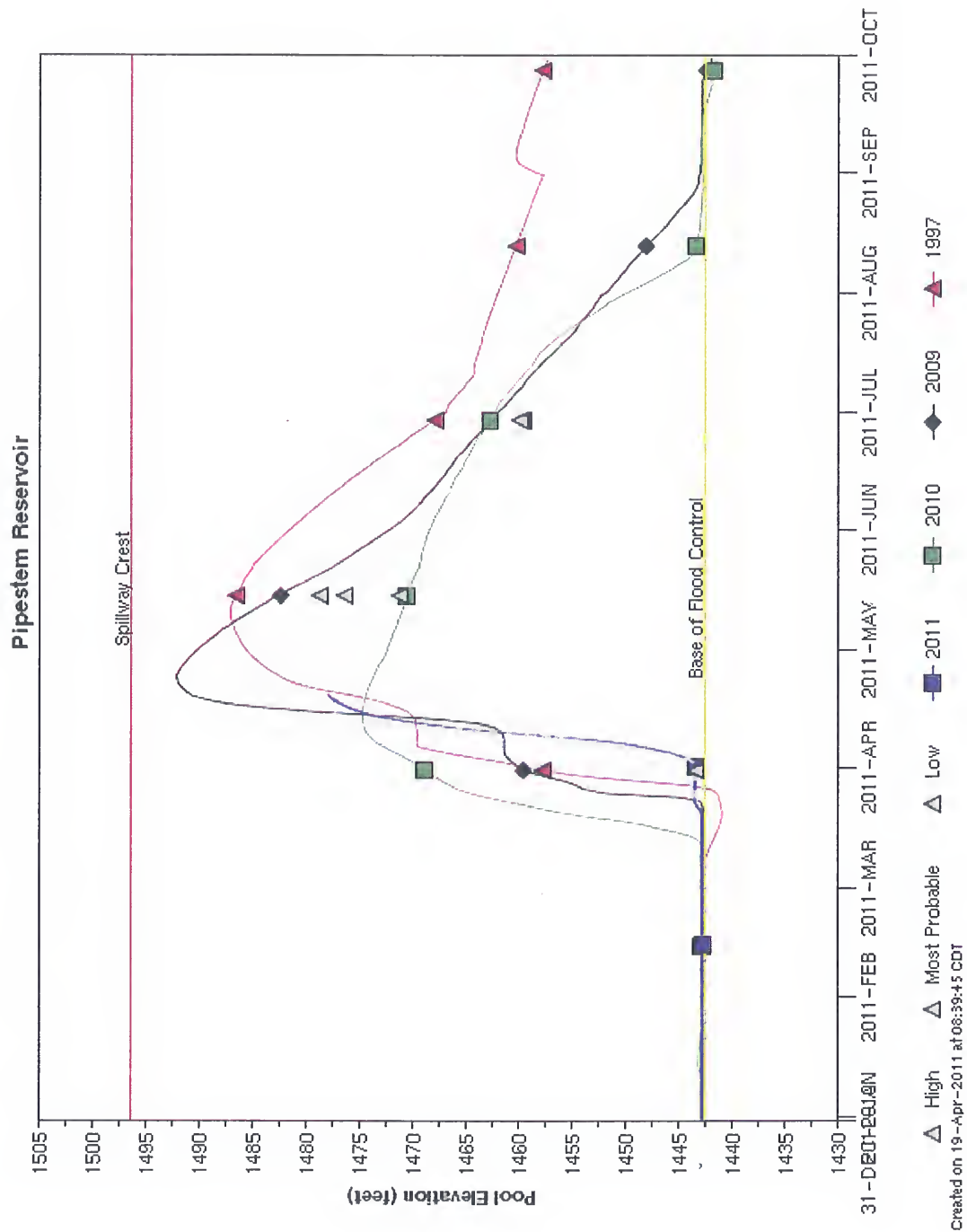
Inches of water equivalent

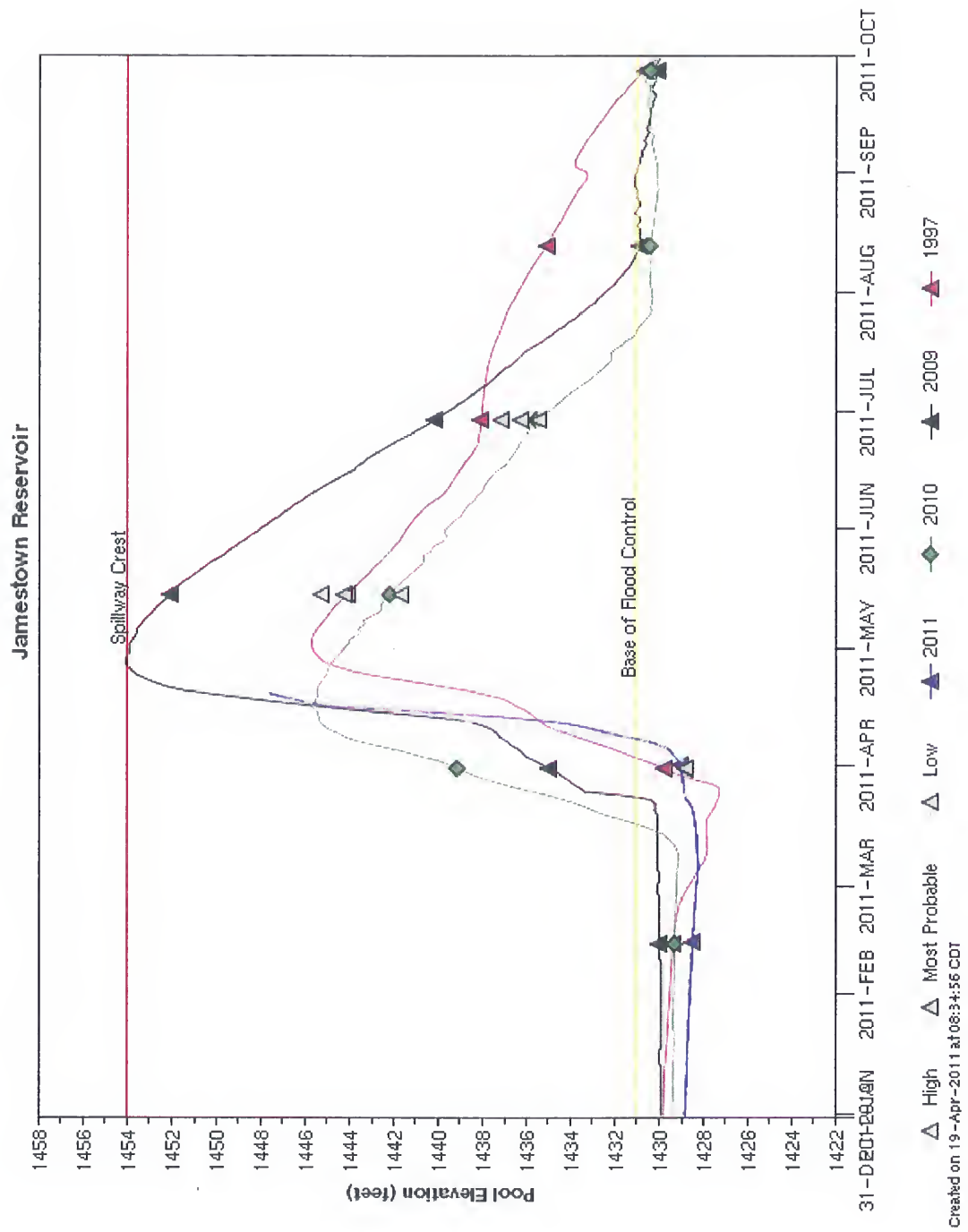


Not Estimated

Elevation in feet
(Not estimated)







[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Wednesday, April 20, 2011 2:07 PM
To: [REDACTED] NWD02
Cc: [REDACTED] NWD02
Subject: Re: System Releases and other stuff (UNCLASSIFIED)

Sounds like a good plan.

Jody

----- Original Message -----

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Sent: Wed Apr 20 09:51:36 2011
Subject: System Releases and other stuff (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,

After much coordination with GAPT operators and OPM's, we've come up with the following:

1. Full GAPT power plant release is 33.5 kcfs. We'll increase to that at midnight tonight (currently at 32 kcfs). This increase does coincide with the James River at Scotland peak, but stages downstream from GAPT to OMA are still in the channel and below flood stage. The locations where we are above flood stage (Neb City to St. Joe) are more affected by the Platte River, which has peaked and is declining ... NCNE-STJ are all peaking after tomorrow's GAPT increase would get there.
2. We'll maintain full power plant release from Gavins through the weekend (Mike is weekend worker).
3. After consulting with Dave Becker and Tom Curran, both would like Monday morning to put out their spillway buoys. Spillway releases (3 kcfs ... total of 33.5 kcfs to 36.5 kcfs) from Gavins will be done at 1500 hours. We'll then increase another 2.5 kcfs from the spillway at 1500 hours at Tuesday (total release of 39.0 kcfs, 33.5 power + 5.5 spill).
4. [REDACTED] are working up the revised runoff forecast with today's snowpack numbers. And then [REDACTED] will update the monthly forecast.

- [REDACTED]

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Thursday, April 21, 2011 1:00 PM
To: [REDACTED] NWD02
Subject: Re: Harold Mitchell (UNCLASSIFIED)

Remind me where he farms and at what river level he is impacted. I don't get why he knows right now that he won't get a crop in. Our releases will be well within the channel. Or is he just pre-worrying?

Jody

----- Original Message -----

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02
Sent: Thu Apr 21 10:39:30 2011
Subject: Harold Mitchell (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Harold Mitchell will be calling you Monday morning. He feels that he's not getting anywhere with me and wants to speak with someone who will listen to him. Per Harold, we did not do our job this winter. We should have released more water and made more room to store all this runoff. This will be the 3rd year of the last 4 (2008, 2010 and 2011) where he won't be able to get a crop in. Welcome back.

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]

[REDACTED] (fax)

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 20, 2011 2:26 PM
To: Oldham, Margaret NWO; Farmer, Monique L NWO
Cc: Farhat, Jody S NWD02; [REDACTED] NWD02
Subject: MRBWM Press Release (UNCLASSIFIED)
Attachments: NR-FR-GP-SpillwayReleasesApr2011.docx

Classification: UNCLASSIFIED
Caveats: NONE

Maggie/Monique,

See attached regarding spillway releases at both Gavins Point and Fort Randall early next week. Is it possible to get this out by this Friday?

Let me know if you have any questions. Thanks.

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]

[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased early next week. "The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system" said Jody Farhat, Chief of the Missouri River Basin Water Management Office in Omaha.

"Our increases will be timed to match the declines in the tributaries which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Farhat.

Gavins Point releases will be increased from 33,500 to 39,000 cfs cubic feet per second (cfs) beginning on Monday, April 25 and then remain at 39,000 for the remainder of the month. Fort Randall releases will be gradually increased to approximately 35,000 in order maintain the Gavins Point pool at a normal elevation. The spillways at Gavins Point and Fort Randall will be utilized for the additional releases. Boaters and recreationists should exercise caution in the area around the spillways and remain clear of the buoys.

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 20, 2011 1:04 PM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Subject: Draft News Release (UNCLASSIFIED)
Attachments: NR-FR-GP-SpillwayReleasesApr2011.docx

Classification: UNCLASSIFIED
Caveats: NONE

Jody,

For your review.

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]
[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

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[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 20, 2011 11:52 AM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Subject: System Releases and other stuff (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,

After much coordination with GAPT operators and OPM's, we've come up with the following:

1. Full GAPT power plant release is 33.5 kcfs. We'll increase to that at midnight tonight (currently at 32 kcfs). This increase does coincide with the James River at Scotland peak, but stages downstream from GAPT to OMA are still in the channel and below flood stage. The locations where we are above flood stage (Neb City to St. Joe) are more affected by the Platte River, which has peaked and is declining ... NCNE-STJ are all peaking after tomorrow's GAPT increase would get there.
2. We'll maintain full power plant release from Gavins through the weekend (Mike is weekend worker).
3. After consulting with Dave Becker and Tom Curran, both would like Monday morning to put out their spillway buoys. Spillway releases (3 kcfs ... total of 33.5 kcfs to 36.5 kcfs) from Gavins will be done at 1500 hours. We'll then increase another 2.5 kcfs from the spillway at 1500 hours at Tuesday (total release of 39.0 kcfs, 33.5 power + 5.5 spill).
4. [REDACTED] are working up the revised runoff forecast with today's snowpack numbers. And then Mike/Joel will update the monthly forecast.

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]

[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 20, 2011 8:02 AM
To: Farhat, Jody S NWD02
Subject: System Releases (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,
FYSA. John Drew called on Monday regarding the forecast being over target. He was wondering why we were not cutting back.

Kelly Casteel called me yesterday and was asking how we are determining Gavins Point releases. Kelly said she was tasked to draft a letter with North Dakota's concerns about high reservoir levels, and the fact that we are not releasing more water.

In both cases I discussed the service level, but also overall system regulation (ex: Oahe near exclusive).

[REDACTED]
Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: Farhat, Jody S NWD02
Sent: Thursday, April 21, 2011 4:52 PM
To: [REDACTED] NWD02; [REDACTED] NWD02
Subject: Mike Wells Call

I spoke to Mike about our planned release increase and assured him we would be watching the storms in Missouri this weekend before coming up on GAPT release on Monday. He said SW Missouri could get as much as 11 inches of rain this weekend.

He asked that we let him know if we make any changes to our planned releases. They are getting media calls already.

Jody

----- Original Message -----

From: Wells, Mike <mike.wells@dnr.mo.gov>
To: Farhat, Jody S NWD02
Sent: Thu Apr 21 14:19:35 2011
Subject: Re: Call

Jody: I am available for a call.

----- Original Message -----

From: Farhat, Jody S NWD02 [<mailto:Jody.S.Farhat@usace.army.mil>]
Sent: Thursday, April 21, 2011 02:20 PM
To: Wells, Mike
Subject: Call

Mike - I tried to reach you but apparently you were out. I'm in a meeting, but if you can send me an email when you're available I'll step out and give you a call.

Jody

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Thursday, April 21, 2011 2:26 PM
To: Blair, Amy E NWK; Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Subject: RE: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Amy,

We should also add the following:

This office is aware of, and is closely monitoring, the precipitation forecasts that are indicating large amounts of rain in the lower basin. We monitor weather and basin conditions on a continual basis, including weekends and holidays, and update our forecasts and System releases accordingly. Please keep in mind that the precipitation forecasts are updated at least 2 times a day and can dramatically change from day to day. The spillway releases are scheduled for Monday afternoon. We will closely examine basin conditions Monday morning.

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]

[REDACTED] (fax)

-----Original Message-----

From: [REDACTED] NWD02
Sent: Thursday, April 21, 2011 2:06 PM
To: Blair, Amy E NWK; Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Subject: RE: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Amy, Please forward this to Mr. Engemann.

=====
Mr. Engemann,

Both the National Weather Service and the MRBWM forecasts indicate the Missouri River cresting at Kansas City, Waverly, Boonville and Hermann all on Saturday, 2 days from now. Both offices have our increased releases factored into their forecasts. The forecasts indicate that the stages are expected to slowly decline after the 23rd. Our release increase from Gavins is scheduled for the 25th and it will take about 5 days for that flow to reach Kansas City about 3 more days after that to reach Hermann. Even with that increased release from Gavins, we expect the tributary inflow (e.g. James River, Big Sioux River, Little Sioux River, Platte River) between Gavins Point and Kansas City to decrease such that the Missouri River stage is at least a foot lower than it is now.

Please feel free to contact me if you have any questions.

Regards,

[REDACTED]
[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE
[REDACTED]
[REDACTED] (fax)

-----Original Message-----

From: Blair, Amy E NWK
Sent: Thursday, April 21, 2011 1:42 PM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02; [REDACTED] NWD02
Subject: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE
Jody,

Sorry to bother you while you are out of the office - but can you speak to Dan's question?

[REDACTED] or [REDACTED], if you can answer this while Jody is out, I would appreciate it.

From: Engemann, Daniel
Sent: Thursday, April 21, 2011 1:24 PM
To: Blair, Amy E NWK
Subject: RE: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

Just tried to call you. Call me at the office when you can. Also, was wondering what a 39,000 release from Gavins Point meant at Jefferson City and Hermann.

Thanks!
Dan

From: Blair, Amy E NWK [mailto:Amy.E.Blair@usace.army.mil]
Sent: Thursday, April 21, 2011 11:24 AM
To: Brown, Chris; Engemann, Daniel; Klippenstein, Brian (Blunt); Mahoney, Christina; Jolley, Geoff; Henry, Peter (Bond); Bohl, Eric; Roe, Melissa; Mason, Jonathan P; Ratto, Mark; Carroll, Patrick
Subject: FW: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE
FYI.

Please let me know if you have any questions.

Amy E. Blair
Congressional Liaison

Kansas City District,
U.S. Army Corps of Engineers
Office: 816-389-3393
Cell: 816-728-3651
Amy.E.Blair@usace.army.mil

From: U.S. Army Corps of Engineers, Omaha District
Sent: Thursday, April 21, 2011 11:17 AM
To: Blair, Amy E NWK
Subject: Corps to increase releases out of Fort Randall, Gavins Point Dams

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NEWS RELEASE

For Immediate Release: April 21, 2011

Contact: Monique Farmer - (402) 995-2420 monique.l.farmer@usace.army.mil Corps to increase releases out of Fort Randall, Gavins Point Dam OMAHA, Neb.—The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased beginning early next week.

“The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system,” said Jody Farhat, Chief of the Missouri River Basin Water Management Office in Omaha.

“Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come,” said Farhat.

Gavins Point releases will be increased from 33,500 to 39,000 cfs cubic feet per second (cfs) beginning on Monday, April 25. They will remain at 39,000 for the remainder of the month.

Fort Randall releases will be gradually increased to approximately 35,000 in order maintain the Gavins Point pool at a normal elevation. The spillways at Gavins Point and Fort Randall will be used for the additional releases. Boaters and recreationists should exercise caution in the area around the spillways and remain clear of the buoys.

###

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U.S. Army Corps of Engineers, 1616 Capitol Ave., Omaha, NE 68102 United States

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Thursday, April 21, 2011 2:06 PM
To: Blair, Amy E NWK; Farhat, Jody S NWD02
Cc: [REDACTED] NWD02
Subject: RE: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Amy, Please forward this to Mr. Engemann.

=====

Mr. Engemann,

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Please feel free to contact me if you have any questions.

Regards,

[REDACTED]

[REDACTED]

Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED]

[REDACTED] (fax)

-----Original Message-----

From: Blair, Amy E NWK
Sent: Thursday, April 21, 2011 1:42 PM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02; [REDACTED] NWD02
Subject: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE
Jody,

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Kevin or Mike, if you can answer this while Jody is out, I would appreciate it.

From: Engemann, Daniel

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To: Blair, Amy E NWK

Subject: RE: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

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Thanks!

Dan

From: Blair, Amy E NWK [mailto:Amy.E.Blair@usace.army.mil]

Sent: Thursday, April 21, 2011 11:24 AM

To: Brown, Chris; Engemann, Daniel; Klippenstein, Brian (Blunt); Mahoney, Christina; Jolley, Geoff; Henry, Peter (Bond); Bohl, Eric; Roe, Melissa; Mason, Jonathan P; Ratto, Mark; Carroll, Patrick

Subject: FW: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

FYI.

Please let me know if you have any questions.

Amy E. Blair

Congressional Liaison

Kansas City District,

U.S. Army Corps of Engineers

Office: 816-389-3393

Cell: 816-728-3651

Amy.E.Blair@usace.army.mil

From: U.S. Army Corps of Engineers, Omaha District

Sent: Thursday, April 21, 2011 11:17 AM

To: Blair, Amy E NWK

Subject: Corps to increase releases out of Fort Randall, Gavins Point Dams

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For Immediate Release: April 21, 2011

Contact: Monique Farmer - (402) 995-2420 monique.l.farmer@usace.army.mil Corps to increase releases out of Fort Randall, Gavins Point Dam OMAHA, Neb.—The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased beginning early next week.

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Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Thursday, April 21, 2011 1:52 PM
To: Farhat, Jody S NWD02
Subject: RE: Harold Mitchell (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

He's near Nebraska City. Flood stage there is 18.0' and he can't drain his fields if it's over 17.0'. I know that you exchanged emails with his Congressman last March/April when the river was high due to all the plains snowmelt. I can't seem to find it in my files.

[REDACTED]

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED] (fax)

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Thursday, April 21, 2011 1:00 PM
To: [REDACTED] NWD02
Subject: Re: Harold Mitchell (UNCLASSIFIED)

Remind me where he farms and at what river level he is impacted. I don't get why he knows right now that he won't get a crop in. Our releases will be well within the channel. Or is he just pre-worrying?

Jody

----- Original Message -----

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02
Sent: Thu Apr 21 10:39:30 2011
Subject: Harold Mitchell (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Harold Mitchell will be calling you Monday morning. He feels that he's not getting anywhere with me and wants to speak with someone who will listen to him. Per Harold, we did not do our job this winter. We should have released more water and made more room to store all this runoff. This will be the 3rd year of the last 4 (2008, 2010 and 2011) where he won't be able to get a crop in. Welcome back.

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED]
[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: Blair, Amy E NWK
Sent: Thursday, April 21, 2011 1:42 PM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD02; [REDACTED] NWD02
Subject: question from Congressman Luetkemeyer's office (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE
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[REDACTED] or [REDACTED], if you can answer this while Jody is out, I would appreciate it.

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Subject: RE: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

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Thanks!
Dan

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Sent: Thursday, April 21, 2011 11:24 AM
To: Brown, Chris; Engemann, Daniel; Klippenstein, Brian (Blunt); Mahoney, Christina; Jolley, Geoff; Henry, Peter (Bond); Bohl, Eric; Roe, Melissa; Mason, Jonathan P; Ratto, Mark; Carroll, Patrick
Subject: FW: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE
FYI.

Please let me know if you have any questions.

Amy E. Blair
Congressional Liaison
Kansas City District,
U.S. Army Corps of Engineers
Office: 816-389-3393
Cell: 816-728-3651
Amy.E.Blair@usace.army.mil

From: U.S. Army Corps of Engineers, Omaha District
Sent: Thursday, April 21, 2011 11:17 AM
To: Blair, Amy E NWK
Subject: Corps to increase releases out of Fort Randall, Gavins Point Dams

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Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Thursday, April 21, 2011 12:40 PM
To: Farhat, Jody S NWD02
Subject: Harold Mitchell (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Harold Mitchell will be calling you Monday morning. He feels that he's not getting anywhere with me and wants to speak with someone who will listen to him. Per Harold, we did not do our job this winter. We should have released more water and made more room to store all this runoff. This will be the 3rd year of the last 4 (2008, 2010 and 2011) where he won't be able to get a crop in. Welcome back.

[REDACTED]

[REDACTED]

Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED]

[REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: William Lay [wlay@[REDACTED]]
Sent: Friday, April 22, 2011 5:15 PM
To: Farhat, Jody S NWD02
Subject: Large releases

Dear Jody,

I think you are right in getting the water out of Randall, but be careful about the area between Gavins and Kansas City. Certainly be careful about Glasgow and Boonville.

Bill Lay

NWO

From: Farmer, Monique L NWO
Sent: Friday, April 22, 2011 12:02 PM
To: Farhat, Jody S NWD02; [REDACTED] NWD02
Subject: FW: Voice Message from Unknown (4023742281) (UNCLASSIFIED)
Attachments: VoiceMessage

Classification: UNCLASSIFIED

Caveats: NONE

Jody or Kevin:

Could one of you call this gentleman? He has concerns about the rise in the river.

MF

-----Original Message-----

From: Unity Messaging System - NWOUNITY1
Sent: Friday, April 22, 2011 10:54 AM
To: Farmer, Monique L NWO
Subject: Voice Message from Unknown (4023742281)

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Thursday, April 21, 2011 3:12 PM
To: [REDACTED] NWO; [REDACTED] NWD02; Farhat, Jody S NWD02; [REDACTED]
[REDACTED] NWO; [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED]
[REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED]
[REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] NWD; [REDACTED] NWK;
[REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWD;
[REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWO; [REDACTED]
NWO; [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWO; [REDACTED]
NWO; [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWO
Cc: Schenk, Kathryn M NWO; [REDACTED] NWK
Subject: FW: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

FYI

Nancy has the River Front website.

<http://www.omahariverfront.com/>

John

From: Nancy Neurohr [<mailto:omaha-riverrat@cox.net>]
Sent: Thursday, April 21, 2011 11:48 AM
To: [REDACTED] NWD
Subject: Re: Corps to increase releases out of Fort Randall, Gavins Point Dams (UNCLASSIFIED)

If anyone cares, we are already starting to flood at Riverland campground & Tyson's Bend north of Blair. Just spent thousands of dollars cleaning up last year's mess. Looks like recreation on the Missouri for us & everyone south is out again this year. Sorry, but this is very frustrating (not to mention expensive) for alot of us.

Nancy Neurohr

----- Original Message -----

From: [REDACTED] NWD <[mailto:\[REDACTED\]@usace.army.mil](mailto:[REDACTED]@usace.army.mil)>

Sent: Thursday, April 21, 2011 11:30 AM

Subject: FW: Corps to increase releases out of Fort Randall, Gavins Point Dams
(UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

From: U.S. Army Corps of Engineers, Omaha District
[mailto:kevin.m.wingert@usace.army.mil]
Sent: Thursday, April 21, 2011 11:17 AM
To: [REDACTED] NWD
Subject: Corps to increase releases out of Fort Randall, Gavins Point Dams

<http://us.vocuspr.com/Publish/520028/vcsPRAsset 520028 348656 c5220867-6ce9-45c0-83c2-dfd9e54e58a1 0 USACE LOGO small.jpg>

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NEWS RELEASE

For Immediate Release: April 21, 2011

Contact: Monique Farmer - (402) 995-2420
monique.l.farmer@usace.army.mil

Corps to increase releases out of Fort Randall, Gavins Point Dam

OMAHA, Neb.—The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased beginning early next week.

“The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system,” said Jody Farhat, Chief of the Missouri River Basin Water Management Office in Omaha.

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<http://us.vocuspr.com/Url.aspx?520028x420511x-908656>

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U.S. Army Corps of Engineers, 1616 Capitol Ave., Omaha, NE 68102 United States

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM
To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED]
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED]
LRL; [REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED]
NWD02; Farhat, Jody S NWD02
Cc: Shadie, Charles E MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

All,

I need before 1030 ET tomorrow (Monday, Apr 24) the information requested by MG Peabody in item 2 below (parts 1 and 2). Pls provide an Excel spreadsheet that lists the reservoir in Column 1; travel time to Cairo in Column 2 in whole days; today's discharge in cfs; and minimum discharge achievable under current conditions in cfs.

My perspective that I will explain to the CG is that 1) we are past the decision window for those reservoirs in LRP and LRH and many in LRL with large travel times to contribute to flow reductions we will be initiating this week with the TVA and LRN reservoir systems; 2) at 2,000,000 cfs at the Ohio-Miss junction, even TVA and LRN's reductions will be relatively small; 3) we are already achieving most benefits of the upstream reservoirs due to their normal flood control activities, 4) there is a highly defined plan for the MR&T that LRD/MVD are actively carrying out.

However, I must show the hard facts to support this perspective and your prompt response will be greatly appreciated.

That said, the CG has asked us to think outside the box. If you have suggestions please forward those as well. If any of the reservoirs outside of TVA and LRN can contribute actively to the lower Ohio-Miss flood fight, please advise me of the strategy.

LRD/LRN/TVA/MVD/NWS have been actively engaged in developing the flood control strategy since late last week. My team has worked tirelessly through the weekend and we appreciate the additional staffing from LRH and LRL. HEC and CRREL have also responded heroically, with Gary Brunner working with Tim Pangburn through the weekend to get the latest levee data into our Ohio River Community model and to initiate flood inundation mapping.

Jody, Kevin, Chuck,

I am 100% certain the CG will ask what the Upper Mississippi and Missouri can do to aid the flood fight. Pls respond with the requested information for your AOCs if you are able.

Regards,
[REDACTED]

[REDACTED]
Chief, Water Management Division

[REDACTED] office

[REDACTED] cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Peabody, John W MG LRDOR
Sent: Sunday, April 24, 2011 6:42 PM
To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02
Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;
DLL-CELRD-District Commanders
Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

ALL - The below is not intended to sound overly dramatic, but it is important we not underestimate the gravity of the impact of the weather forecast on river levels and the potential for massive flooding.

My over-arching guidance:

1. From this moment until a DTG TBD, flood preparations will take top priority over all other planned activities or events, to include the ACRCC, the Chief's Change of Responsibility, and any other pre-planned events.
2. The projected most likely flood event on the lower Ohio and lower Mississippi is likely to approach or exceed record levels. Depending on how the weather evolves in the next month, this event has the potential to reach epic proportions. Therefore we must do every single thing we possibly can do -- no matter how small or seemingly insignificant - to reduce the projected maximum crest at Cairo. This includes thinking well outside our normal procedures,

RICH - Thanks, I was on for nearly all of the call.

Tomorrow I need an hour-long session with WM and EM as a minimum at 1100 (we'll have to move the property accty session), to wargame actions we can start taking now to influence the projected river crest at Cairo around 1 May and beyond. Specifically (but not all-inclusively) I'd like to cover the following:

1. Time for a crest under current flow conditions to move from Pittsburgh to Cairo;
2. Describe the maximum flow reductions achievable at all (each one) of our reserviors in the entire Ohio Watershed basin.
3. Key LL's from other recent flood events (93, 97, 08, etc.).

It is essential that we pull out the stops to fight the peak river crest for this event. Thx!

Best,
John P.

----- Original Message -----

From: [REDACTED] LRDOR
To: Peabody, John W MG LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02
Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;
Landry, Keith A COL LRL; Rager, Steven W LRL
Sent: Sun Apr 24 15:34:59 2011
Subject: FW: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Sir:

Just a few notes from our calls this afternoon. Participated in a phonecon at 1400 hours with MVM, MVD, LRD, and State and USCG reps from the MVD AO. The current forecast from NWS has resulted in MVD increasing their estimated crest at Cairo IL from 58.5 to 60.0 feet. The crest is estimated to occur on 3 May. MVM reported that their estimated crest accounts for the next 48 hours of rainfall but does not account for the full 5-day forecast. It also does not account for any reduction in the crest that we can achieve thru reduced outflow at Kentucky and Barkley.

Debbie Lee reported that our internal LRD model is showing a crest of 61 feet at Cairo IL based on current rainfall on the ground (not including the 5-day forecast). Our model does take into account a reduction of approximately 1.5 feet based on reduced outflow at Kentucky and Barkley beginning on 26 April.

CLOSE-HOLD: MVD has a detailed plan for commencing loading, launching, arrival, and the ultimate decision to exercise the explosives barge. They are following an MVD OPOD which discusses this process. They are also very sensitive about STRATCOMS regarding this plan and have included STRATCOMS, a press release, etc...into their plan. I am providing this info for you, but please do not release since MVD is working the STATCOMS.

25 Apr: 1900 hours, Commence Loading Barge and preparations to launch
26 Apr: 1900 hours, Launch
28 Apr: 0900 hours, Arrive onsite at Birds Point New Madrid and prep site
28 Apr: Midnight, Set-Off explosives

The next decision point for MG Walsh, as the MRC President, is Tuesday morning 26 Apr, when MG Walsh will make the decision on whether to prepare the fuse plug.

Once again - this is close hold and MVD is covering the STRATCOMS.

Concerning our plans for Kentucky and Barkley, we are continuing to draw down the lakes to increase storage capacity. Our plan is to initiate cutting the outflow on 26 Apr and continue with the reduced outflows until 6 May. Our estimate is that we can reduce the crest at Cairo by ~1.5 feet.

The next phonecon we had was at 1430 this afternoon with LRD districts and FEMA region 5. All districts are decisively engaged or actively monitoring the event. No significant concerns were reported in LRE, LRC, LRB, or LRP.

LRL: Reported that 6 lakes are nearing record pools. This includes Cave Run, Monroe, West Fork, Patoka, Taylorsville, and Harsha (aka East Fork). No significant concerns were noted with these lakes, there is still storage capacity available, and LRL is monitoring closely.

L/D 52 and 53 are not locking, but navigation is available over the wickets. Newburgh ceased locking today at 1600 hours. Navigation is still available over the fixed weir if the Coast Guard Waterways Action Plan constraints are met. Constraints include minimum horsepower requirements, a helper boat, etc... JT Meyers will cease locking sometime tonight but navigation will still be available over the fixed weir (same constraints apply).

The only big navigation concern at this point is McAlpine. The north chamber (old 1200 chamber) will cease locking tonight or tomorrow. The south chamber (new 1200 foot chamber) is expected to continue locking for the next several days, but is being monitored closely and

may need to cease locking mid to late week (when the upper gage reaches 38'). If/when this happens it will stop navigation.

LRH: Water Management is monitoring the Muskingham basin closely and has not pulled the trigger yet on deploying their Geotech team.

The FEMA 5 Watch Officer reported no issues to discuss during our call.

Best Regards,
[REDACTED]

-----Original Message-----

From: [REDACTED] LRDOR

Sent: Sunday, April 24, 2011 3:44 PM

To: DLL-CELRD-Water Management Update

Subject: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Afternoon Water Management Update - 24 April 2011

Situational Review and Outlook:

Over the past 24 hours, showers and thunderstorms formed throughout the Division AOR. The heaviest rains fell on an axis running along the Ohio River between Cairo and Huntington, WV with 2 to 4 inch rain totals. Very heavy rain was observed in southern Missouri with widespread 3 to 5 inch rain totals along the Mississippi between St. Louis and New Madrid. Rainfall in central Illinois, central Indiana and central Ohio was 0.25 inches to 1 inch. Rainfall in the Lake Erie and Ontario basins was less than an inch with mainly dry conditions for most of the Lake Michigan, Huron and Superior drainage areas.

Today, heavy rain and thunderstorms will continue to impact the Ohio Valley in the same areas along the Ohio River between Cairo, IL and Huntington, WV with the southern part of Missouri also receiving very heavy rain. Rainfall totals today through Monday morning are forecast to be 1 to 3 inches in northwestern Kentucky, southern Ohio, southern Indiana, southern Illinois and southern Missouri with locally higher amounts in thunderstorms. 0.25 to 1 inch rain is forecast today for northern Illinois, northern Indiana, Ohio, West Virginia and Pennsylvania.

Tomorrow, the rainfall axis will shift north and west. Indiana, southern Illinois and southern Missouri will continue to see the heaviest rainfall event with the shift. A break in the rainfall will occur for most of Kentucky, West Virginia, western Pennsylvania and the southeastern two thirds of Ohio. Rainfall totals of 1 to 3 inches are forecast for western New York, southern Michigan, most of Indiana and Illinois, far western Kentucky near the Barkley and Kentucky Dams, far western Tennessee near Memphis and southeastern Missouri.

Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %
Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %
Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %
Brookville	27.5 %
Nolin River	28.7 %

Nashville District:

Barkley	23.2 % (sloped pool storage)
Dale Hollow	28.7 %

TVA:

Kentucky Dam	22.0 % (sloped pool storage)
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Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

NWO

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:03 AM
To: Farmer, Monique L NWO
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Monique - thanks for sending this clarification. I was thinking the same thing when I read the article. Way to be on top of things!

Jody

-----Original Message-----

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 9:55 AM
To: 'marshall.white@newspressnow.com'
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Good morning Marshall:

Hope you had a good weekend. I just wanted to clarify something in the article below which was picked up by Water Environment Research and lists you as the contact. The article seems to convey to the reader that it is unnecessary for the Corps to evacuate floodwaters stored in the Missouri main stem system right now because all of that floodwater was evacuated prior to the start of the runoff season, which begins March 1 (see paragraphs 10-11). It is true that we evacuated more than 9 million acre-feet of water prior to the start of the runoff season in order to be prepared for any potential flooding we might face this year. The important thing to remember is that we began the runoff season with all of our flood control storage available. Then, we began to receive runoff from plains snowpack early this year (in February). Therefore, we were already accumulating additional water into the system as early as February. We must evacuate that water as soon as possible in order to be prepared for what is forecast to take place from April through June. We consistently monitor downstream conditions and time our increases to match the declines in the tributaries so that we are coming in behind crests as opposed to adding to any lowland flooding downstream.

Hope this helps and as always, please call us with any questions.

Very respectfully,

Monique Farmer/Sr. Public Affairs Specialist Omaha District, U.S. Army Corps of Engineers
Office: (402) 995-2420
Blackberry: (402) 779-1460
My Strengths - Gallup StrengthsFinder

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Water Environment Research
Alexandria, VA
04/24/2011

Industry News - Missouri River on the rise

April 23--The National Weather Service and the Missouri River Basin Forecast Center at Pleasant Hill have had flood warnings posted for several days, saying St. Joseph is in danger of low-level flooding.

"The ground is pretty well saturated," said Ron Blakley, a member of the local port authority's board of directors and an area farmer. "River rises raised the water table, and back behind the levees people can expect to begin seeing some ponding."

The National Weather Service agrees with Mr. Blakley.

On Thursday, forecasters said that at 17 feet, lowland flooding occurs upstream and downstream from St. Joseph.

On Friday, the weather service said flooding continues to be likely in low-lying areas of Doniphan County, Kansas, and on the Missouri side in Andrew and Buchanan counties. Instead of cresting on Friday, the weather service said the river would continue rising, with a crest at 17.6 feet this afternoon. The Basin Forecast Center only projects Missouri River conditions for the next 24 hours; there is no prediction yet for next week.

"I don't see it going down anytime soon," said Ken Reeder, who owns land north of Heritage Park along the river. Mr. Reeder also serves as a committee member on the U.S. Army Corps of Engineers' Missouri River Recovery program. And the corps announced Thursday that it wants more water in the Missouri River.

Gavins Point releases will be increased from 33,500 to 39,000 cubic feet per second beginning Monday, said Monique Farmer, an Omaha-based spokeswoman for the Corps. The release level will remain at 39,000 cubic feet per second for the remainder of the month, she said.

"That's going to make the Missouri a fast-rolling river," Mr. Blakley said.

Current forecasts call for additional chances of rain through Monday.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," stated Jody Farhat, Missouri River Basin Water Management chief at the Omaha office.

Yet, at the annual meeting of the Missouri River Levee and Drainage Districts Association in February, Mrs. Farhat said the corps would finish evacuating last year's stored flood water well before this year's spring flooding, Mr. Reeder said.

Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Mrs. Farhat.

The National Weather Service continues to issue flash-flood warnings from Jefferson City eastward along the Missouri River and southward below St. Louis on the Mississippi River.

Marshall White can be reached at marshall.white@newspressnow.com.

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Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:29 PM
To: Randy Asbury
Cc: Farhat, Jody S NWD02
Subject: RE: Missouri River News - April 25, 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Randy,
Thanks for the email. We are watching river conditions on the lower Missouri River closely and have coordinated with the Corps' Mississippi Valley Division and Lakes and Rivers Division on the situation on the Mississippi. Unfortunately there's very little we can do. The Mississippi River at Cairo is forecast to crest near 61 feet on May 3rd.

Our current legal interpretation of the 44 FCA is that we are not authorized to regulate the mainstem system solely for the benefit of the Mississippi River. Even if we could, it would take 10 days travel time from Gavins Point to the mouth, and several more days to get to the critical reach near Cairo.

In addition we have critical issues in the Missouri River basin. Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is at the base of the exclusive zone, and Fort Peck and Garrison are forecast to enter their respective exclusive flood control zones when the mountain snowpack melts.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water. This may end up being one of the wettest years on record.

Sorry I don't have any better news. I intend to brief this situation at the MRRIC meeting next week. Let me know if you have any questions.

Regards,
Jody

-----Original Message-----
From: Randy Asbury [mailto:moriver@howardelectricwb.com]
Sent: Monday, April 25, 2011 5:52 PM
To: Farhat, Jody S NWD02
Subject: FW: Missouri River News - April 25, 2011

Jody:

I realize the Gavins Point releases are insignificant in relation to what's happening on the Mississippi. In spite of that, any consideration you could give to releases in the next few days would likely be appreciated by stakeholders in the lower basin. Just a thought.

Thank you for your consideration.

Sincerely,

Randy Asbury

From: Gary Marshall [mailto:GMarshall@mocorn.org]
Sent: Monday, April 25, 2011 11:14 AM
To: Randy Asbury
Subject: RE: Missouri River News - April 25, 2011

Randy we're hearing the Corps is thinking about flooding the Birds Point levee in New Madrid and Mississippi counties to relieve pressure on the Ohio river near Cairo, Il. This would flood over 131,000 acres of prime Missouri farmland which lies in that area. Low laying areas near Cairo and all along the levee area already flooding. It's our hope they would allow this natural relief to occur rather than creating a "man made" scenario which might not work.

Blowing that levee was tried back in the 1920's and did not work. There is no reason to think it would be different now. I know this isn't a Missouri river issue, but knowing the Corps is thinking about increasing releases on the upper Missouri will only add to a already miserable situation down river everywhere. Just keeping you in the loop. G

Gary D. Marshall

Chief Executive Officer

Missouri Corn Growers Association

Missouri Corn Merchandising Council

3118 Emerald Lane

Jefferson City, MO 65109

573/893-4181

573/893/4612 - Fax

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From: Randy Asbury [mailto:moriver@howardelectricwb.com]
Sent: Monday, April 25, 2011 10:44 AM
To: Randy Asbury
Subject: Missouri River News - April 25, 2011

Corps' clippings are attached.

-----Original Message-----

From: Ernest.Perry@modot.mo.gov [mailto:Ernest.Perry@modot.mo.gov]
Sent: Thursday, April 21, 2011 1:53 PM
Subject: Missouri River Navigation Action Meeting! - Agenda and Final Reminder

Good afternoon all: We hope to see you next Thursday at Rocheport for the

Missouri River Navigation Action Meeting. We have poured through the commodity data, visited with everyone in the industry we could find, and reviewed reams of analysis to take a hard look at the freight navigation market and market potential for the Missouri River. And you who work with the river know what the data and analysis has told us - The Outlook for Freight Navigation on the Missouri River is Excellent and Getting Better!

So please join us next Thursday in Rocheport. Based on your input, we have developed some solid approaches to market development, new markets, and industry development. We are also working hard on plans to continue to elevate the status and recognition of this great resource - The Missouri River.

See you next week! An agenda is attached.

(See attached file: RocheportAgenda11m04d20.pdf) Missouri River Navigation Action Meeting

9 am -2:30 pm

Thursday, April 28, 2011

Les Bourgeois Restaurant

800-690-1830

14020 W. Highway BB

Rocheport, MO 65279

Thank you for participating in this important event!

Ernie

Ernest B. Perry, Ph.D.

Freight Development Administrator

MoDOT

573-526-5578

For Immediate Release: April 21, 2011

Contact: Monique Farmer - (402) 995-2420

monique.l.farmer@usace.army.mil

Corps to increase releases out of Fort Randall, Gavins Point Dam

OMAHA, Neb.—The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased beginning early next week.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," said Jody Farhat, Chief of the Missouri River Basin Water Management Office in Omaha.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Farhat.

Gavins Point releases will be increased from 33,500 to 39,000 cfs cubic feet per second (cfs) beginning on Monday, April 25. They will remain at 39,000 for the remainder of the month. Fort Randall releases will be gradually increased to approximately 35,000 in order maintain the Gavins Point pool at a normal elevation. The spillways at Gavins Point and Fort Randall will be used for the additional releases. Boaters and recreationists should exercise caution in the area around the spillways and remain clear of the buoys.

###

From: Blair, Amy E NWK [mailto:Amy.E.Blair@usace.army.mil]

Sent: Thursday, April 21, 2011 3:25 PM

To: Blair, Amy E NWK

Cc: Missouri River Recovery Admin Record

Subject: April 2011 MRRP Bulletin (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

MRRP bulletin - April 2011

Please go to the below link for the newest Missouri River Recovery Program Bulletin. Click on the desired bulletin listed under "Periodic Bulletins."

<http://www.moriverrecovery.org/mrrp/f?p=136:4>

If you received this e-mail in a forward from a friend and would like to receive it directly, please join our website ListServ:

<<http://www.moriverrecovery.org/mrrp/f?p=136:162>>

If you no longer wish to receive these notices, please send an email to me at

<<mailto:Amy.E.Blair@usace.army.mil?subject=Remove%20From%20List>>

Amy E. Blair

Outreach Specialist

Kansas City District,

U.S. Army Corps of Engineers

Office: 816-389-3393

Cell: 816-728-3651

Amy.E.Blair@usace.army.mil

From: Cerchi, Antonella I NWK [<mailto:Antonella.I.Cerchi@usace.army.mil>]

Sent: Wednesday, April 20, 2011 6:59 AM

To: Cerchi, Antonella I NWK

Subject: Public Notice Announcement - U.S. Army Corps of Engineers, Kansas City District

Public Notice No. 2009-1740 <<http://www.nwk.usace.army.mil/regulatory/CurrentPN/2009-1740.pdf>> :

Applicant - Steve Lee

Activity - Berm Construction

County, State - Chariton County, Missouri

Public Notice Comment Period Expires on May 11, 2011

The above public notice has also been posted at
<http://www.nwk.usace.army.mil/regulatory/CurrentPN/currentnotices.htm>

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Please feel free to complete our Regulatory Service Survey at:

<http://per2.nwp.usace.army.mil/survey.html>

~~~~~


Randy

Randy Asbury

Executive Director

Coalition to Protect the Missouri River (CPR)

4849 Hwy B

Higbee, MO 65257

660-273-9903 Phone

573-823-7906 Cell

636-594-8401 Fax

moriver@howardelectricwb.com

www.ProtectTheMissouri.com <<http://www.protectthemissouri.com/>>

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:50 PM
To: [REDACTED] NWO; [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] NWO; [REDACTED] NWO; 'Carol_Aron@fws.gov'; 'Henry Maddux'; [REDACTED] NWD02
Cc: [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWD; Anderson, G Witt NWD
Subject: RE: Piping Plover below Garrison Dam (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Bird Team - 2011 is lining up to be one of the wettest years on record and quite frankly there may be very little we can do for the birds. Here are the hard facts:

Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is currently at the base of the exclusive zone. Fort Peck and Garrison are well into their annual flood control zones and are forecast to enter their respective exclusive flood control zones when the mountain snowpack melt begins.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water. This may end up being one of the wettest years on record, quite similar to 1997 if you have a good memory.

As for Garrison, with Oahe at the base of the exclusive flood control zone, we cannot yet begin to increase releases from Garrison until we get Oahe headed down.

We'll have more details when we update our monthly studies early next week. I propose we have our first "bird call" on Friday this week to answer any questions you may have on current conditions, and the second call next week after the studies are updated. I know some of you will be at the MRRIC meeting so perhaps we can look at the agenda and find a time that would work for all of us. I don't intend to arrive at the MRRIC meeting until Wed morning, so Tuesday afternoon, anytime on Wednesday or Thursday morning would work for me.

Sorry I don't have any better news.

Let me know if you have any questions.

Jody

-----Original Message-----

From: [REDACTED] NWO

Sent: Monday, April 25, 2011 2:17 PM

To: Farhat, Jody S NWD02; [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] NWO;
[REDACTED] NWO; Carol_Aron@fws.gov
Cc: [REDACTED] NWO; [REDACTED] NWO; [REDACTED] NWO
Subject: Piping Plover below Garrison Dam (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Hi All,

[REDACTED] led a reconnaissance of the Missouri River above Stanton ND today and observed six to seven piping plovers on the sandbar at RM 1374.5. This sandbar has been a major nesting site for piping plovers and least terns over the past several years. With piping plovers reported that far up the Garrison River Segment I would expect that there are plovers on sandbars downriver from RM 1374.5 all the way south of Bismarck. I would also expect the plovers to begin nesting soon. I did a quick check of the database and came up with the following numbers for the past eleven years (2000-2010) for piping plover nesting below Garrison. On average, 2.6 nests have been initiated by April 30 and 34.3 nests have been initiated by May 13. These numbers need to be caveated by the USGS study where the USGS personnel found many more nests in early May below Garrison compared to our crews. Thus the numbers quoted above are probably conservative and the actual number of nests was probably much higher.

There is the additional fact that due to low releases over the past two years, we have seen record number of piping plovers on the Garrison River Segment. In 2009 275 plover adults were counted and in 2010, 287 adults were counted. This represents 30% of all plovers on the Missouri in 2009 and 48% of all plovers on the Missouri in 2010. Due to strong site fidelity by the plovers and the current releases of 15,000 cfs out of Garrison that are similar to last year releases, I would expect that we would see a lot of plovers returning to Garrison and that they would start nesting, sooner rather than later.

According to the April 20 three week forecast, releases out of Garrison are not scheduled to increase from 15,000 until May 2. From there they are scheduled to incrementally increase to 18,000 on May 2, 22,000 on May 3, 24,000 on May 9, 26,000 on May 11 and 27,000 on May 13. To prevent incidental take, the releases out of Garrison should be increased sooner than currently forecast. However, where to send the water is a huge question. I see that Oahe is already into its exclusive flood zone at 1617.0 msl. If water cannot be stored there, that would leave Lake Francis Case as the only storage option or to pass the water through increased releases out of Gavins Point. I don't know if Francis Case has the storage capacity to absorb increased releases out of Garrison. Increased releases out of Gavins Point would further inundate the constructed sandbar habitat below that dam and exacerbate flooding concerns in the channelized river. I do not envy the juggling act you have to perform.

Greg

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

NWO

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 11:01 PM
To: Farmer, Monique L NWO; 'Marshall White'
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall - I'm on travel Monday night and Tuesday. If you'd like I can try to give you a call tomorrow afternoon after my meeting. The number I have is 816-271-8646. Is that correct?

Just some background information for your use:

2011 is lining up to be one of the wettest years on record.

Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water in the mainstem reservoir system due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is currently at the base of the exclusive zone. Fort Peck and Garrison are well into their annual flood control zones and are forecast to enter their respective exclusive flood control zones when the mountain snowpack melt begins.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water. We'll have a better idea just how high when the studies are done next Tuesday, May 2nd. This may end up being one of the wettest years on record, quite similar to 1997 if you have a good memory.

I don't know if you want to do a story now, or wait for the updated studies early next week. The numbers will be more firm early next week, but we are getting quite a few calls from folks in your area.

I'll give you a call late tomorrow afternoon when my meeting is over, but I will be available by email during the day if you have questions.

Regards,
Jody

-----Original Message-----

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 11:22 AM
To: 'Marshall White'
Cc: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Marshall:

Will do.

Thanks,

MF

-----Original Message-----

From: Marshall White [mailto:marshall.white@newspressnow.com]

Sent: Monday, April 25, 2011 11:20 AM

To: Farmer, Monique L NWO

Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

No intent to declare unnecessary, just a question about timing with the river on the rise. As Jody said, you have enough storage for this year. So the question is, is this the best time to be releasing water? Below Jefferson City all the way to St. Louis the river is causing problems and then there is the Mississippi south of St. Louis all the way down to Memphis. Have Jody call me and maybe we can do another story talking about it.

Marshall

----- Original Message -----

From: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>

To: "marshall white" <marshall.white@newspressnow.com>

Sent: Monday, April 25, 2011 9:54:49 AM

Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Good morning Marshall:

Hope you had a good weekend. I just wanted to clarify something in the article below which was picked up by Water Environment Research and lists you as the contact. The article seems to convey to the reader that it is unnecessary for the Corps to evacuate floodwaters stored in the Missouri main stem system right now because all of that floodwater was evacuated prior to the start of the runoff season, which begins March 1 (see paragraphs 10-11).

It is true that we evacuated more than 9 million acre-feet of water prior to the start of the runoff season in order to be prepared for any potential flooding we might face this year. The important thing to remember is that we began the runoff season with all of our flood control storage available.

Then, we began to receive runoff from plains snowpack early this year (in February). Therefore, we were already accumulating additional water into the system as early as February. We must evacuate that water as soon as possible in order to be prepared for what is forecast to take place from April through June. We consistently monitor downstream conditions and time our increases to match the declines in the tributaries so that we are coming in behind crests as opposed to adding to any lowland flooding downstream.

Hope this helps and as always, please call us with any questions.

Very respectfully,

Monique Farmer/Sr. Public Affairs Specialist Omaha District, U.S. Army Corps of Engineers
Office: (402) 995-2420
Blackberry: (402) 779-1460
My Strengths - Gallup StrengthsFinder

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<http://www.nwo.usace.army.mil>

Water Environment Research
Alexandria, VA
04/24/2011

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"The ground is pretty well saturated," said Ron Blakley, a member of the local port authority's board of directors and an area farmer. "River rises raised the water table, and back behind the levees people can expect to begin seeing some ponding."

The National Weather Service agrees with Mr. Blakley.

On Thursday, forecasters said that at 17 feet, lowland flooding occurs upstream and downstream from St. Joseph.

On Friday, the weather service said flooding continues to be likely in low-lying areas of Doniphan County, Kansas, and on the Missouri side in Andrew and Buchanan counties. Instead of cresting on Friday, the weather service said the river would continue rising, with a crest at 17.6 feet this afternoon. The Basin Forecast Center only projects Missouri River conditions for the next 24 hours; there is no prediction yet for next week.

"I don't see it going down anytime soon," said Ken Reeder, who owns land north of Heritage Park along the river. Mr. Reeder also serves as a committee member on the U.S. Army Corps of Engineers' Missouri River Recovery program.

And the corps announced Thursday that it wants more water in the Missouri River.

Gavins Point releases will be increased from 33,500 to 39,000 cubic feet per second beginning Monday, said Monique Farmer, an Omaha-based spokeswoman for the Corps. The release level will remain at 39,000 cubic feet per second for the remainder of the month, she said.

"That's going to make the Missouri a fast-rolling river," Mr. Blakley said.

Current forecasts call for additional chances of rain through Monday.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," stated Jody Farhat, Missouri River Basin Water Management chief at the Omaha office.

Yet, at the annual meeting of the Missouri River Levee and Drainage Districts Association in February, Mrs. Farhat said the corps would finish evacuating last year's stored flood water well before this year's spring flooding, Mr. Reeder said.

Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Mrs. Farhat.

The National Weather Service continues to issue flash-flood warnings from Jefferson City eastward along the Missouri River and southward below St. Louis on the Mississippi River.

Marshall White can be reached at marshall.white@newspressnow.com.

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Caveats: NONE

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Caveats: NONE

NWO

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 11:14 PM
To: William Lay
Subject: RE: River (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Bill,

Thanks for the email. We are watching river conditions on the lower Missouri River closely. Unfortunately we're between a rock and a hard place on the Missouri River this year.

Despite the fact that all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is at the base of the exclusive zone, and Fort Peck and Garrison are forecast to enter their respective exclusive flood control zones when the mountain snowpack melts.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water. This may end up being one of the wettest years on record.

Sorry I don't have any better news. I intend to brief this situation at the MRRIC meeting next week. Let me know if you have any questions.

See you next week.

Jody

-----Original Message-----

From: William Lay [<mailto:wlay@socket.net>]
Sent: Monday, April 25, 2011 9:38 AM
To: Farhat, Jody S NWD02
Subject: River

Dear Jody,

You might want to hold up on letting out more water.

Bill

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWO
Sent: Monday, April 25, 2011 4:10 PM
To: [REDACTED] NWK; Farhat, Jody S NWD02
Subject: RE: Status of levee repairs (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,

All of our priority areas on the riverside of the levees have been completed. Levee 550 is going to be our main levee of concern as we are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils we had there last year. There are a few additional levees that we haven't been funded for but will just have to coordinate possible temporary repairs if necessary prior to releases, just let us know.

Thanks,

[REDACTED]
Chief, Readiness Branch
U.S. Army Corps of Engineers - Omaha District
1616 Capitol Ave., Ste 9000
Omaha, NE 68102
[REDACTED] Office
[REDACTED] Blackberry
[REDACTED] [\[REDACTED\]@usace.army.mil](mailto:[REDACTED]@usace.army.mil)

-----Original Message-----

From: [REDACTED] NWK
Sent: Monday, April 25, 2011 1:18 PM
To: Farhat, Jody S NWD02; [REDACTED] NWO
Subject: RE: Status of levee repairs (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Union Township and Holt County have LOP in-place. Baltimore Bend is under construction. Belzer-Lozier will follow Baltimore. I have six levee systems with various degrees of sidewash and other damage that I have not received funding for repairs. I'm not opposed to taking additional emergency action. Look at your scenarios and tell me where you think the stages will be. I'm ready to ramp up myself -- thanks -- Jud

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 12:55 PM
To: [REDACTED] NWO; [REDACTED] NWK
Subject: Status of levee repairs (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] and [REDACTED],

Can you or someone from your district provide me with an update on the status of the ongoing levee repairs? This is stacking up to be a very high runoff year for the mainstem reservoir system which will require us to evacuate the reservoir system at a higher release than was seen last year. We are looking at various release options and the status of the levee systems is one piece of that decision process.

Thanks,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil

Office: 402-996-3840

Cell: 402-350-1417

Home: [REDACTED]

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWK
Sent: Monday, April 25, 2011 1:18 PM
To: Farhat, Jody S NWD02; Thomas, Kimberly S NWO
Subject: RE: Status of levee repairs (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

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-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 12:55 PM
To: Thomas, Kimberly S NWO; [REDACTED] NWK
Subject: Status of levee repairs (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Kim and Jud,
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Thanks,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil
Office: 402-996-3840
Cell: 402-350-1417
Home: [REDACTED]

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 11:22 AM
To: 'Marshall White'
Cc: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall:

Will do.

Thanks,

MF

-----Original Message-----

From: Marshall White [mailto:marshall.white@newspressnow.com]
Sent: Monday, April 25, 2011 11:20 AM
To: Farmer, Monique L NWO
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

No intent to declare unnecessary, just a question about timing with the river on the rise. As Jody said, you have enough storage for this year. So the question is, is this the best time to be releasing water? Below Jefferson City all the way to St. Louis the river is causing problems and then there is the Mississippi south of St. Louis all the way down to Memphis. Have Jody call me and maybe we can do another story talking about it.

Marshall

----- Original Message -----

From: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>
To: "marshall white" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 9:54:49 AM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

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Hope this helps and as always, please call us with any questions.

Very respectfully,

Monique Farmer/Sr. Public Affairs Specialist Omaha District, U.S. Army Corps of Engineers
Office: (402) 995-2420
Blackberry: (402) 779-1460
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Water Environment Research
Alexandria, VA
04/24/2011

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Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

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Marshall White can be reached at marshall.white@newspressnow.com.

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Caveats: NONE

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Caveats: NONE

Classification: UNCLASSIFIED

NWO

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 10:07 AM
To: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

That's what we're here for ;)

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:03 AM
To: Farmer, Monique L NWO
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Monique - thanks for sending this clarification. I was thinking the same thing when I read the article. Way to be on top of things!

Jody

-----Original Message-----

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 9:55 AM
To: 'marshall.white@newspressnow.com'
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Good morning Marshall:

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Office: (402) 995-2420
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Alexandria, VA
04/24/2011

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Current forecasts call for additional chances of rain through Monday.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," stated Jody Farhat, Missouri River Basin Water Management chief at the Omaha office.

Yet, at the annual meeting of the Missouri River Levee and Drainage Districts Association in February, Mrs. Farhat said the corps would finish evacuating last year's stored flood water well before this year's spring flooding, Mr. Reeder said.

Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Mrs. Farhat.

The National Weather Service continues to issue flash-flood warnings from Jefferson City eastward along the Missouri River and southward below St. Louis on the Mississippi River.

Marshall White can be reached at marshall.white@newspressnow.com.

To see more of the St. Joseph News-Press or to subscribe to the newspaper, go to <http://www.stjoenews-press.com/>.

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Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: William Lay [wlay@[REDACTED]]
Sent: Monday, April 25, 2011 9:38 AM
To: Farhat, Jody S NWD02
Subject: River

Dear Jody,

You might want to hold up on letting out more water.

Bill

[REDACTED] NWO

From: [REDACTED] LRDOR
Sent: Monday, April 25, 2011 9:29 AM
To: Farhat, Jody S NWD02
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Jody,

Thank you very much for this critical information. It will help address my Commander's questions. Thank you for including BG McMahon. As a member of the Mississippi River Commission, he will need to be conversant in this for immediate and ongoing discussions with the MRC of which MG Peabody is also a member. Have you personally engaged him on this yet or vice versa? I thought it may be helpful as a heads up should MG Peabody engage him.

Regards,

[REDACTED]
Chief, Water Management Division

[REDACTED] office

[REDACTED] cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:11 AM

To: [REDACTED] LRDOR

Cc: [REDACTED] NWD02; [REDACTED] MVD; [REDACTED] NWK; [REDACTED] NWK;
[REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; Tipton, Robert A Col NWD;
McMahon, John R BG NWD; [REDACTED] NWD; [REDACTED] NWD

Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Debbie - as I'm sure you know, our authorizing legislation does not allow the Corps to operate the Missouri River Mainstem Reservoir System solely for the benefit of the Mississippi River.

That said, our current releases from the most downstream of the mainstem dams, Gavins Point, are currently being scheduled at 33,500 cfs. Travel time from Gavins Point to St. Louis is approximately 10 days. Releases are scheduled to increase to 39,000 cfs early this week due to the need to evacuate flood waters from the mainstem reservoir system.

The melt of the Missouri River basin plains snowpack is nearly complete, but the mountain snowpack is 130 percent of normal and still rising. Since March 1 the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control pool. In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

I've cc'd Kansas City District H&H branch to see if they have any regulation flexibility, particularly in the operation of HS Trumann reservoir in Missouri.

For those who don't know her, Debbie Lee is my counterpart in charge of Water Management for LRD.

Let me know if you need any additional information.

Good luck.

Regards,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil
Office: 402-996-3840
Cell: 402-350-1417
Home: [REDACTED]

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM
To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED]
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED] LRL;
[REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED] NWD02; Farhat,
Jody S NWD02
Cc: Shadie, Charles E MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

All,

I need before 1030 ET tomorrow (Monday, Apr 24) the information requested by MG Peabody in item 2 below (parts 1 and 2). Pls provide an Excel spreadsheet that lists the reservoir in Column 1; travel time to Cairo in Column 2 in whole days; today's discharge in cfs; and minimum discharge achievable under current conditions in cfs.

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However, I must show the hard facts to support this perspective and your prompt response will be greatly appreciated.

That said, the CG has asked us to think outside the box. If you have suggestions please forward those as well. If any of the reservoirs outside of TVA and LRN can contribute actively to the lower Ohio-Miss flood fight, please advise me of the strategy.

LRD/LRN/TVA/MVD/NWS have been actively engaged in developing the flood control strategy since late last week. My team has worked tirelessly through the weekend and we appreciate the additional staffing from LRH and LRL. HEC and CRREL have also responded heroically, with [REDACTED] working with [REDACTED] through the weekend to get the latest levee data into our Ohio River Community model and to initiate flood inundation mapping.

Jody, Kevin, Chuck,

I am 100% certain the CG will ask what the Upper Mississippi and Missouri can do to aid the flood fight. Pls respond with the requested information for your AOCs if you are able.

Regards,

Chief, Water Management Division

office

cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Peabody, John W MG LRDOR

Sent: Sunday, April 24, 2011 6:42 PM

To: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] HQ02; [REDACTED]

[REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;

DLL-CELRD-District Commanders

Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

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3. Key LL's from other recent flood events (93, 97, 08, etc.).

It is essential that we pull out the stops to fight the peak river crest for this event.
Thx!

Best,

John P.

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From: [REDACTED] LRDOR
To: Peabody, John W MG LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02
Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRL; Keith A COL LRL; [REDACTED] LRL
Sent: Sun Apr 24 15:34:59 2011
Subject: FW: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

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Sir:

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CLOSE-HOLD: MVD has a detailed plan for commencing loading, launching, arrival, and the ultimate decision to exercise the explosives barge. They are following an MVD OPORD which discusses this process. They are also very sensitive about STRATCOMS regarding this plan and have included STRATCOMS, a press release, etc...into their plan. I am providing this info for you, but please do not release since MVD is working the STATCOMS.

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Once again - this is close hold and MVD is covering the STRATCOMS.

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The only big navigation concern at this point is McAlpine. The north chamber (old 1200 chamber) will cease locking tonight or tomorrow. The south chamber (new 1200 foot chamber) is expected to continue locking for the next several days, but is being monitored closely and may need to cease locking mid to late week (when the upper gage reaches 38'). If/when this happens it will stop navigation.

LRH: Water Management is monitoring the Muskingham basin closely and has not pulled the trigger yet on deploying their Geotech team.

The FEMA 5 Watch Officer reported no issues to discuss during our call.

Best Regards,
Rich Hancock

-----Original Message-----

From: [REDACTED] LRDOR

Sent: Sunday, April 24, 2011 3:44 PM

To: DLL-CELRD-Water Management Update

Subject: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Afternoon Water Management Update - 24 April 2011

Situational Review and Outlook:

Over the past 24 hours, showers and thunderstorms formed throughout the Division AOR. The heaviest rains fell on an axis running along the Ohio River between Cairo and Huntington, WV with 2 to 4 inch rain totals. Very heavy rain was observed in southern Missouri with widespread 3 to 5 inch rain totals along the Mississippi between St. Louis and New Madrid. Rainfall in central Illinois, central Indiana and central Ohio was 0.25 inches to 1 inch. Rainfall in the Lake Erie and Ontario basins was less than an inch with mainly dry conditions for most of the Lake Michigan, Huron and Superior drainage areas.

Today, heavy rain and thunderstorms will continue to impact the Ohio Valley in the same areas along the Ohio River between Cairo, IL and Huntington, WV with the southern part of Missouri also receiving very heavy rain. Rainfall totals today through Monday morning are forecast to be 1 to 3 inches in northwestern Kentucky, southern Ohio, southern Indiana, southern Illinois and southern Missouri with locally higher amounts in thunderstorms. 0.25 to 1 inch rain is forecast today for northern Illinois, northern Indiana, Ohio, West Virginia and Pennsylvania.

Tomorrow, the rainfall axis will shift north and west. Indiana, southern Illinois and southern Missouri will continue to see the heaviest rainfall event with the shift. A break in the rainfall will occur for most of Kentucky, West Virginia, western Pennsylvania and the southeastern two thirds of Ohio. Rainfall totals of 1 to 3 inches are forecast for western New York, southern Michigan, most of Indiana and Illinois, far western Kentucky near the Barkley and Kentucky Dams, far western Tennessee near Memphis and southeastern Missouri.

Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %
Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %

Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %
Brookville	27.5 %
Nolin River	28.7 %

Nashville District:

Barkley	23.2 % (sloped pool storage)
Dale Hollow	28.7 %

TVA:

Kentucky Dam	22.0 % (sloped pool storage)
--------------	------------------------------

Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Monday, April 25, 2011 8:44 AM
To: Farhat, Jody S NWD02
Subject: FW: LRD Commander's Guidance (UNCLASSIFIED)
Attachments: NWD Reservoirs - Lower Missouri River Basin.xlsx

Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

See attached.

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED]
[REDACTED] (fax)

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM
To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP;
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED] LRL;
[REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED] NWD02; Farhat,
Jody S NWD02
Cc: Shadie, Charles E MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
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Regards,

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office

cell

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To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; DLL-CELRD-District Commanders

Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

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Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;
Landry, Keith A COL LRL; Rager, Steven W LRL
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Classification: UNCLASSIFIED

Caveats: NONE

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Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %

Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %
Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %
Brookville	27.5 %
Nolin River	28.7 %

Nashville District:

Barkley	23.2 % (sloped pool storage)
Dale Hollow	28.7 %

TVA:

Kentucky Dam	22.0 % (sloped pool storage)
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Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED

Caveats: NONE

Reservoir	Travel Time to Cairo	Today's Discharge (in cfs)
Gavins Point (Missouri R)	13	33,500
Harlan County (Rep-Kansas R)	16	275
Milford (Rep-Kansas R)	12	800
Kanopolis (L Kansas R)	14	30
Wilson (L Kansas R)	7	15
Webster (L Kansas R)	9	0
Tuttle Creek (L Kansas R)	11	800
Perry Creek (L Kansas R)	8	25
Clinton (L Kansas R)	8	21
Blue Springs (KC Metro)	7	41
Longview (KC Metro)	7	30
Smithville (KC Metro)	7	8
Rathbun (Chariton R)	8	500
Long Branch (Chariton R)	7	285
Pomona (Osage R)	9	15
Melvern (Osage R)	9	20
Hillsdale (Osage R)	8	8
Pomme de Terre (Osage R)	7	2,883
Stockton (Osage R)	7	2,000
Harry S Truman (Osage R)	6	7,150

Minimum Discharge (cfs)

6,000 MRBWM

10 NWK
25 NWK
50 NWK
15 NWK
0 NWK
100 NWK
25 NWK
21 NWK
0 NWK
8 NWK
8 NWK
25 NWK
7 NWK
15 NWK
20 NWK
8 NWK
50 NWK
40 NWK
0 NWK

NWO

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 12:27 AM
To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo. Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] (NWK) and [REDACTED] (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

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Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. Mike Swenson will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 10:29 PM
To: McMahon, John R BG NWD
Cc: Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD02; [REDACTED] NWD02
Subject: RE: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Sir - we'll look at it and see what we can to. Perhaps a middle ground would be to continue up to the 45,000 this week, and then hold until the stage at Cairo falls below 60 feet. That would allow us to do something for the Mississippi while helping out the landowners in the Nebraska City to St. Joseph reach and still getting some flood evacuation started. This would also avoid the legal argument about operating the Mainstem System solely for the benefit of the Mississippi. In addition, if travel time is taken into consideration, it may not delay our come-up too long. I would recommend we make any offer of assistance contingent on the status of the Missouri since the situation seems to be worsening by the day.

On another note, my uncle passed away today so I will be out of the office tomorrow and Thursday. I plan to work from home for a couple hours tomorrow morning, and will be available by cell phone and bb email the remainder of the time. I plan to be on the Guidons call Thursday morning with the District commanders, but in the event I'm unavailable, I will have Mike Swenson take my place. Mike will be in charge of WM during my absence. You can contact him via email, office phone (402-996-3860) or cell phone at (402-779-1445). Kevin Grode will also be available via email, office phone (402-996-3870) or cell phone at (402-779-1444). Both are fully knowledgeable in all aspects of system regulation and stand ready to provide any assistance you need.

We'll follow up in the morning as to whether we think this plan is workable. If you have any preferences or suggestions, please pass them on asap so we can look at various alternatives before providing a firm recommendation before noon CST.

VR,
Jody

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:37 PM
To: Farhat, Jody S NWD02; Swenson, Michael A NWD02
Cc: Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Subject: Fw: Missouri River Basin Update (UNCLASSIFIED)

Jody:

Please look this over to see what if any incidental benefit opportunity there is here--would like some feedback by noon CST so I can participate in GEN Walsh's call fully informed.

Thanks.

Vr/John McMahon

----- Original Message -----

From: Walsh, Michael J MG MVD
To: McMahon, John R BG NWD; Peabody, John W MG LRDOR
Sent: Tue Apr 26 19:24:32 2011
Subject: Re: Missouri River Basin Update (UNCLASSIFIED)

John;

Great report. In regards to the flood way, it is reported that we will be at 60 on the Cairo gate for a long time perhaps past 12 may but my notes are in the office. I asked my HH guys to see if you can hold off until after we be below 60? HH guys working. This will be the longest the system will be under such a heavy load in ??? Perhaps ever. Any help in the out days will get us past the long stress on the project.

I will call tomorrow both you and brother Peabody after I fly the system and land in Mo and before the press event.

Mike

----- Original Message -----

From: McMahon, John R BG NWD

To: Van Antwerp, Robert L LTG HQ02; Walsh, Michael J MG MVD; Peabody, John W MG LRDOR

Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02;

[REDACTED] NWD; [REDACTED] NWD; Farhat, Jody S NWD02; Ruch, Robert J COL NWO;

Hofmann, Anthony J COL NWK; Tipton, Robert A Col NWD; [REDACTED] HQ02; [REDACTED]

NWD; [REDACTED] NWD; [REDACTED] NWD

Sent: Tue Apr 26 20:28:29 2011

Subject: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Chief:

We have been closely monitoring the evolving situation across the ENTIRE Mississippi River Watershed (the 3d largest in the world as Mike Walsh likes to refer to it) and wanted to update you and the other Div Engineers on the specifics of the situation in the Missouri Basin as options are considered and decisions are made.

1. The Missouri Basin typically endures 2 pulses of snowmelt and runoff each year--one in the plains in the March-April timeframe and one later in the early summer in May-July timeframe. We are generally finished with the first pulse and have been participating in various smaller floodfights at the district level which continue today--generally, these are going "well" as far as local flooding and suffering can go.
2. The snowpack melt is expected to approach record levels as it is still accumulating in the mountains--was 115% of Normal on 1 April, is 130% as of 25 April and projected to approach the record of 137% on 1 May (which was the 1997 record). This translates into a another BIG year of cautiously but aggressively evacuating the Missouri Mainstem System Storage as we did last year (2010) which as you may recall was exacerbated by untimely rains in the plans below Gavins Point Dam, the last point on the Mainstem from which we can regulate flows.
3. Since March 1, the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control zone (EFCZ). In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.
4. Our current plans to evacuate the system (subject to change as we get the next forecasts o/a 1 May and finalize the next iteration of our Runoff Forecasts and Reservoir Forecasts next week), are to increase releases from Gavins Point from 33.5 Kcfs on Monday (25 April) to 36.5 Kcfs on Tues to 42 Kcfs on Wed to 45 Kcfs on Thursday, anticipating that we will likely need to increase releases even further once the next forecasts come out next week--these releases may increase up to 55 Kcfs early in May knowing what we know today. These increases are necessitated by the pool in each of the BIG 3 reservoirs at the upper end of the system as follows: Oahe--from inches away from being in the EFCS on 25 April to +2 ft

into the EFCZ; Garrison--from -4 feet to +2 feet into the EFCZ; and Fort Peck--from -4 feet to +2 feet into the EFCZ--our margin of safety and opportunity to regulate flow in quickly shrinking and we are acting now to address what portends to be a very high (if not record) year. We are also closely monitoring the ongoing work to repair levees that were damaged during last year's high water events in both NWO and NWK footprints.

5. As with our experience last summer, we are very sensitive to the downstream affects of these increases in release rates from Gavins Point and are monitoring the lower reaches of the system very carefully as we do. Obviously, given what is happening in LRD and MVD, we are equally concerned about the impacts to the Mississippi River. To that end, there is limited legal authority (if any) within the Missouri Basin to "operate [these] reservoirs to benefit interests on the Mississippi River" without invoking "extraordinary circumstance and considerations of extraordinary authority" at the HQUSACE level. Nonetheless, we are coordinating through our respective division River Management offices any "incidental" benefits that may possibly accrue from such coordination. These citations are from a Les Edelman legal opinion, written as Chief Counsel on 17 August 1990. That said, I seriously doubt we have much flexibility here given our predicament in the upper basin already.

6. By the way, there is a 10 day travel time component between Gavins Point and St Louis, with another 2+ days to Cairo, Ill. So even if we wanted to do something, the timing of the flows puts us past 8 May, several days past the current projected peak flow there at Cairo. We continue to stay engaged as this situation unfolds.

VR, John

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

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As for the levee status, I received the following updates from Jud Kneuvean (NWK) and Kim Thomas (NWO):

█████ indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

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Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. Mike Swenson will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: FOUO

NWO

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 10:30 PM
To: [REDACTED] NWD02
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

No, I think prayer is a method. Ask Betty - I'm sure she will confirm.

-----Original Message-----

From: [REDACTED] NWD02
Sent: Tuesday, April 26, 2011 9:22 PM
To: Farhat, Jody S NWD02
Subject: Fw: Update since this morning's Missouri River call (UNCLASSIFIED)

If hope is NOT a strategy, what is prayer?

[REDACTED]
[REDACTED]
MRBWM Res Reg Team Lead
[REDACTED] (Office)
[REDACTED] (BB)

Message sent via my BlackBerry Wireless Device

----- Original Message -----

From: McMahon, John R BG NWD
To: Hofmann, Anthony J COL NWK; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Ruch, Robert J COL NWO
Sent: Tue Apr 26 19:03:50 2011
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Thanks, Tony.

As I read your chart below, we are or will be out of bank in multiple locations and consequently enduring interior flooding/backup in many places....so I expect we'll be hearing again from the many farmers/associations along the river. This situation will get decidedly worse if we get any serious amount of rain, presently not forecast but....so, we'll hope (and pray) for the best and stay engaged. Thanks.

VR, John McMahon

-----Original Message-----

From: Hofmann, Anthony J COL NWK
Sent: Tuesday, April 26, 2011 3:47 PM
To: McMahon, John R BG NWD; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
[REDACTED] NWD; [REDACTED] NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Ruch, Robert J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Sir: Saw Bob Ruch's earlier email. NWK levee status not as good, mainly due to inability to get to the work (given saturated conditions from last year/this winter) and the timing of funding for our federal levees. As you know, release from Gavins is going to increase. That being said, we think we'll have issues only if conditions hit those listed below (we are not at that level yet). Potential impacts to levees/status as follows:

Non-federal:

Union Township - LOP restored/project complete Holt County 10 - LOP restored Baltimore Bend - LOP restored Belcher-Lozier - Breach Open/Contract in place/water will enter breach at 19-20' stage at Waverly gage

Federal:

Seepage problems were encountered in 2010 flood event at R471-460, L-497. Unsubstantiated problems (boils) were also reported at R-500, several months after last year's event. Anticipated action stages based on gage readings for these units are below. Would also be in contact with sponsors well in advance of these action stages:

For R471-460, boils were first observed at a stage reading on the St Joseph gage of approximately 26 feet. These boils were ringed and ultimately three temporary relief wells were installed during the flood fight in anticipation of increasing river levels and these wells remain in place. These are pumped wells. ED-GG supplied the pumps in 2010. Our Action stage to get pumps to the site would be at about 22 on St Joseph gage with forecast of increasing stages. ED-GD would deploy team for levee performance monitoring at about the same stage.

For L-497 sand boils were first observed at a stage reading on the Rulo gage of 26.6 which was the record stage at that gage. Project staff gage readings at initiation of boils was about 93.5. ED-GD would deploy team for levee performance monitoring at about 24 on the Rulo gage.

For R-500 we have no specific documentation on initiation of boil activity from 2010. ED-GD would deploy team for levee performance monitoring at about 24 on the Rulo gage.

Unfunded Levee Rehab Projects - We should not expect funds. All funds are being diverted to Response Operations. Jud Kneuvean attempting to reallocate some existing funds for the efforts. Worst case scenario is that we prepare to move when/if we enter response mode. Game changes at that point.

Current condition update as of this morning:

Status remains unchanged. Rulo to St. Joe is holding fairly steady and projected to do so through at least end of the week. The focus continues on the lower river from Gasconade to St. Charles. Heavy precipitation continues over SE Missouri in areas under SWL, MVS, MVM. We have assisted the State of Missouri with coordination with the affected Districts. We have had no requests for assistance beyond a few regarding flapgates stuck open. We have handled those on an individual basis. Current forecast is listed at the very end of this email.

RIVER/STATION	FS	TDY	F O R E C A S T
MISSOURI RIVER			
NEBRASKA CITY NE	18.0	19.4	CREST NEAR 19.5 FT 04/26 PM
BROWNVILLE NE	33.0	35.2E	GAGE MALFUNCTIONING...CREST

NEAR 35.3 FT 04/26 PM

RULO NE	17.0	18.3	CREST NEAR 18.4 FT 04/27 AM
ST JOSEPH MO	17.0	17.3	CREST NEAR 17.5 FT 04/27 AM
ATCHISON KS NO.1	22.0	20.3E	CREST NEAR 20.5 FT 04/27 PM
NAPOLEON MO	17.0	16.3	CREST NEAR 16.7 FT 04/27 AM
WAVERLY MO	20.0	18.8	CREST NEAR 19.4 FT 04/27 AM
MIAMI MO	18.0	17.3E	CREST NEAR 18.2 FT 04/27 PM
CHAMOIS MO	17.0	17.0	CREST NEAR 17.1 FT 04/26 PM
GASCONADE MO	22.0	24.3	CREST NEAR 24.4 FT 04/26 PM
HERMANN MO	21.0	21.8	CREST NEAR 23.2 FT 04/29 AM
WASHINGTON MO	20.0	18.7	CREST NEAR 20.0 FT 04/29 PM
ST CHARLES MO 1E	25.0	24.5	CREST NEAR 25.2 FT 04/30 AM

Any questions, please let me know.
Tony

Building Strong!

Colonel Anthony J. Hofmann, PMP
Commander, Kansas City District
U.S. Army Corps of Engineers

Office: (816) 389-3202
Fax: (816) 389-2027
<http://www.nwk.usace.army.mil/>

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] R NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] Ruch, Robert
J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Roger, Jody. Thanks.
Cdrs:

When do we anticipate levee repairs below to be completed?
Bob Tipton: what funding needs are still outstanding to complete on the Missouri? What is
status/expectation of funding from HQs?
Thanks.
VR, John McMahon

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; Ponganis, David J NWD; Tipton, Robert A Col NWD; Leighow, John K NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD;
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
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Classification: UNCLASSIFIED
Caveats: NONE

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I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. [REDACTED] will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,

Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 8:28 PM
To: Van Antwerp, Robert L LTG HQ02; Walsh, Michael J MG MVD; Peabody, John W MG LRDOR
Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] NWD; [REDACTED] NWD; Farhat, Jody S NWD02; Ruch, Robert J COL NWO; Hofmann, Anthony J COL NWK; Tipton, Robert A Col NWD; [REDACTED] HQ02; [REDACTED] NWD; [REDACTED] NWD
Subject: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Chief:

We have been closely monitoring the evolving situation across the ENTIRE Mississippi River Watershed (the 3d largest in the world as [REDACTED] likes to refer to it) and wanted to update you and the other Div Engineers on the specifics of the situation in the Missouri Basin as options are considered and decisions are made.

1. The Missouri Basin typically endures 2 pulses of snowmelt and runoff each year--one in the plains in the March-April timeframe and one later in the early summer in May-July timeframe. We are generally finished with the first pulse and have been participating in various smaller floodfights at the district level which continue today--generally, these are going "well" as far as local flooding and suffering can go.
2. The snowpack melt is expected to approach record levels as it is still accumulating in the mountains--was 115% of Normal on 1 April, is 130% as of 25 April and projected to approach the record of 137% on 1 May (which was the 1997 record). This translates into a another BIG year of cautiously but aggressively evacuating the Missouri Mainstem System Storage as we did last year (2010) which as you may recall was exacerbated by untimely rains in the plans below Gavins Point Dam, the last point on the Mainstem from which we can regulate flows.
3. Since March 1, the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control zone (EFCZ). In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.
4. Our current plans to evacuate the system (subject to change as we get the next forecasts o/a 1 May and finalize the next iteration of our Runoff Forecasts and Reservoir Forecasts next week), are to increase releases from Gavins Point from 33.5 Kcfs on Monday (25 April) to 36.5 Kcfs on Tues to 42 Kcfs on Wed to 45 Kcfs on Thursday, anticipating that we will likely need to increase releases even further once the next forecasts come out next week--these releases may increase up to 55 Kcfs early in May knowing what we know today. These increases are necessitated by the pool in each of the BIG 3 reservoirs at the upper end of the system as follows: Oahe--from inches away from being in the EFCZ on 25 April to +2 ft into the EFCZ; Garrison--from -4 feet to +2 feet into the EFCZ; and Fort Peck--from -4 feet to +2 feet into the EFCZ--our margin of safety and opportunity to regulate flow in quickly shrinking and we are acting now to address what portends to be a very high (if not record) year. We are also closely monitoring the ongoing work to repair levees that were damaged during last year's high water events in both NWO and NWK footprints.
5. As with our experience last summer, we are very sensitive to the downstream affects of these increases in release rates from Gavins Point and are monitoring the lower reaches of the system very carefully as we do. Obviously, given what is happening in LRD and MVD, we are equally concerned about the impacts to the Mississippi River. To that end, there is limited legal authority (if any) within the Missouri Basin to "operate [these] reservoirs to benefit interests on the Mississippi River" without invoking "extraordinary circumstance and

VR, John

the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

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Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Tuesday, April 26, 2011 7:04 PM
To: Farhat, Jody S NWD02
Subject: Flood Potential Updates

Jody, when there is a flood potential like there has been this spring on the mainstem Missouri, does your office prepare these reports like I see Districts prepare for tribs? If so, could I see an example of one, and how often do you issue them?

Thanks

[REDACTED] NWO

From: Hofmann, Anthony J COL NWK
Sent: Tuesday, April 26, 2011 5:47 PM
To: McMahon, John R BG NWD; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Ruch, Robert J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Sir: Saw Bob Ruch's earlier email. NWK levee status not as good, mainly due to inability to get to the work (given saturated conditions from last year/this winter) and the timing of funding for our federal levees. As you know, release from Gavins is going to increase. That being said, we think we'll have issues only if conditions hit those listed below (we are not at that level yet). Potential impacts to levees/status as follows:

Non-federal:

Union Township - LOP restored/project complete Holt County 10 - LOP restored Baltimore Bend - LOP restored Belcher-Lozier - Breach Open/Contract in place/water will enter breach at 19-20' stage at Waverly gage

Federal:

Seepage problems were encountered in 2010 flood event at R471-460, L-497. Unsubstantiated problems (boils) were also reported at R-500, several months after last year's event. Anticipated action stages based on gage readings for these units are below. Would also be in contact with sponsors well in advance of these action stages:

For R471-460, boils were first observed at a stage reading on the St Joseph gage of approximately 26 feet. These boils were ringed and ultimately three temporary relief wells were installed during the flood fight in anticipation of increasing river levels and these wells remain in place. These are pumped wells. ED-GG supplied the pumps in 2010. Our Action stage to get pumps to the site would be at about 22 on St Joseph gage with forecast of increasing stages. ED-GD would deploy team for levee performance monitoring at about the same stage.

For L-497 sand boils were first observed at a stage reading on the Rulo gage of 26.6 which was the record stage at that gage. Project staff gage readings at initiation of boils was about 93.5. ED-GD would deploy team for levee performance monitoring at about 24 on the Rulo gage.

For R-500 we have no specific documentation on initiation of boil activity from 2010. ED-GD would deploy team for levee performance monitoring at about 24 on the Rulo gage.

Unfunded Levee Rehab Projects - We should not expect funds. All funds are being diverted to Response Operations. [REDACTED] attempting to reallocate some existing funds for the efforts. Worst case scenario is that we prepare to move when/if we enter response mode. Game changes at that point.

Current condition update as of this morning:

Status remains unchanged. Rulo to St. Joe is holding fairly steady and projected to do so through at least end of the week. The focus continues on the lower river from Gasconade to St. Charles. Heavy precipitation continues over SE Missouri in areas under SWL, MVS, MVM. We have assisted the State of Missouri with coordination with the affected Districts. We have

had no requests for assistance beyond a few regarding flapgates stuck open. We have handled those on an individual basis. Current forecast is listed at the very end of this email.

RIVER/STATION	FS	TDY	F O R E C A S T
MISSOURI RIVER			
NEBRASKA CITY NE	18.0	19.4	CREST NEAR 19.5 FT 04/26 PM
BROWNVILLE NE	33.0	35.2E	GAGE MALFUNCTIONING...CREST NEAR 35.3 FT 04/26 PM
RULO NE	17.0	18.3	CREST NEAR 18.4 FT 04/27 AM
ST JOSEPH MO	17.0	17.3	CREST NEAR 17.5 FT 04/27 AM
ATCHISON KS NO.1	22.0	20.3E	CREST NEAR 20.5 FT 04/27 PM
NAPOLEON MO	17.0	16.3	CREST NEAR 16.7 FT 04/27 AM
WAVERLY MO	20.0	18.8	CREST NEAR 19.4 FT 04/27 AM
MIAMI MO	18.0	17.3E	CREST NEAR 18.2 FT 04/27 PM
CHAMOIS MO	17.0	17.0	CREST NEAR 17.1 FT 04/26 PM
GASCONADE MO	22.0	24.3	CREST NEAR 24.4 FT 04/26 PM
HERMANN MO	21.0	21.8	CREST NEAR 23.2 FT 04/29 AM
WASHINGTON MO	20.0	18.7	CREST NEAR 20.0 FT 04/29 PM
ST CHARLES MO 1E	25.0	24.5	CREST NEAR 25.2 FT 04/30 AM

Any questions, please let me know.
Tony

Building Strong!

Colonel Anthony J. Hofmann, PMP
Commander, Kansas City District
U.S. Army Corps of Engineers

Office: (816) 389-3202
Fax: (816) 389-2027
<http://www.nwk.usace.army.mil/>

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK; Ruch, Robert
J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Roger, Jody. Thanks.
Cdrs:
When do we anticipate levee repairs below to be completed?

Bob Tipton: what funding needs are still outstanding to complete on the Missouri? What is status/expectation of funding from HQs?

Thanks.

VR, John McMahon

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo. Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] and Kim Thomas (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

Kim indicated that all of NWO's priority areas on the riverside of the levees have been completed. Levee 550 is going to be the main levee of concern as they are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

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I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. Mike Swenson will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: Ruch, Robert J COL NWO
Sent: Tuesday, April 26, 2011 5:10 PM
To: McMahon, John R BG NWD; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Sir,

The bottom line is that we are buttoned up and ready for high water. Along the Missouri mainstem, there are two levee rehabs ongoing (L611-614 and L550). I feel pretty good about the current status as we have completed the riverside work as scheduled prior to 01 March. The remaining concern is L-550 seepage issue we saw during last year's flood event. We are continuing to mitigate those issues with placement of seepage berms and relief wells. If L-550 has water against the levee again this year for an extended period of time, there will be extensive monitoring required as well as possible temporary emergency measures. Even under current conditions it is sloppy behind those levees and really has remained that way for the past year.

L-611-614 is not of concern as water does not tend to stay on the levee for extended periods of time like it does on L-550 which sits at the bottleneck of the Missouri River above Rulo, NE. There are areas of newly placed levee that do not have substantial sod cover to protect against erosion that may need to be protected by other means in an emergency situation. Both levees are scheduled to be physically complete by 01 December 2011.

We have five Priority 2 levees that are unlikely to be funded and that does not cause me great concern based on our current risk assessments. The problem is that we are likely to see new Priority 1 projects come out of this year's expected high water and we will never get to the lower priority levees.

I think we will cover status of levee repair in some detail at the PRB later this week.

V/R,

COL Bob Ruch
Commander
Omaha District, USACE
(402) 995-2001
<https://www.nwo.usace.army.mil/>

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
NWD

Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: [REDACTED] NWD02
Sent: Tuesday, April 26, 2011 4:32 PM
To: Farhat, Jody S NWD02
Subject: FW: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,

I called Marshall. Could be an interesting article. He's didn't seem convinced about us not being able to do anything to help out with the Mississippi River. Anyway, he wanted me to pass on to you that if you want to speak with him, you need to call him before 5:15.

- [REDACTED]
[REDACTED]
Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 3:32 PM
To: [REDACTED] NWD02; [REDACTED] NWD02
Subject: Fw: Mo. River on the rise article (UNCLASSIFIED)

----- Original Message -----

From: Marshall White <marshall.white@newspressnow.com>
To: Farhat, Jody S NWD02
Sent: Tue Apr 26 13:28:03 2011
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

back in the office call me at that 271-8646 number

Marshall

----- Original Message -----

From: "Jody S NWD02 Farhat" <Jody.S.Farhat@usace.army.mil>
To: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>, "Marshall White" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 11:00:36 PM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall - I'm on travel Monday night and Tuesday. If you'd like I can try to give you a call tomorrow afternoon after my meeting. The number I have is 816-271-8646. Is that correct?

Just some background information for your use:

2011 is lining up to be one of the wettest years on record.

Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water in the mainstem reservoir system due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is currently at the base of the exclusive zone. Fort Peck and Garrison are well into their annual flood control zones and are forecast to enter their respective exclusive flood control zones when the mountain snowpack melt begins.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water.

We'll have a better idea just how high when the studies are done next Tuesday, May 2nd. This may end up being one of the wettest years on record, quite similar to 1997 if you have a good memory.

I don't know if you want to do a story now, or wait for the updated studies early next week. The numbers will be more firm early next week, but we are getting quite a few calls from folks in your area.

I'll give you a call late tomorrow afternoon when my meeting is over, but I will be available by email during the day if you have questions.

Regards,
Jody

-----Original Message-----

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 11:22 AM
To: 'Marshall White'
Cc: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall:

Will do.

Thanks,

MF

-----Original Message-----

From: Marshall White [mailto:marshall.white@newspressnow.com]
Sent: Monday, April 25, 2011 11:20 AM
To: Farmer, Monique L NWO
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

No intent to declare unnecessary, just a question about timing with the river on the rise. As Jody said, you have enough storage for this year. So the question is, is this the best time to be releasing water? Below Jefferson City all the way to St. Louis the river is causing problems and then there is the Mississippi south of St. Louis all the way down to Memphis. Have Jody call me and maybe we can do another story talking about it.

Marshall

----- Original Message -----

From: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>
To: "marshall white" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 9:54:49 AM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Good morning Marshall:

Hope you had a good weekend. I just wanted to clarify something in the article below which was picked up by Water Environment Research and lists you as the contact. The article seems to convey to the reader that it is unnecessary for the Corps to evacuate floodwaters stored in the Missouri main stem system right now because all of that floodwater was evacuated prior to the start of the runoff season, which begins March 1 (see paragraphs 10-11).

It is true that we evacuated more than 9 million acre-feet of water prior to the start of the runoff season in order to be prepared for any potential flooding we might face this year. The important thing to remember is that we began the runoff season with all of our flood control storage available.

Then, we began to receive runoff from plains snowpack early this year (in February). Therefore, we were already accumulating additional water into the system as early as February. We must evacuate that water as soon as possible in order to be prepared for what is forecast to take place from April through June. We consistently monitor downstream conditions and time our increases to match the declines in the tributaries so that we are coming in behind crests as opposed to adding to any lowland flooding downstream.

Hope this helps and as always, please call us with any questions.

Very respectfully,

Monique Farmer/Sr. Public Affairs Specialist Omaha District, U.S. Army Corps of Engineers
Office: (402) 995-2420
Blackberry: (402) 779-1460
My Strengths - Gallup StrengthsFinder

Communication

Input

Maximizer

Relator

Consistency

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www.facebook.com/OmahaUSACE Visit our Web page at:

Water Environment Research
Alexandria, VA
04/24/2011

Industry News - Missouri River on the rise

April 23--The National Weather Service and the Missouri River Basin Forecast Center at Pleasant Hill have had flood warnings posted for several days, saying St. Joseph is in danger of low-level flooding.

"The ground is pretty well saturated," said Ron Blakley, a member of the local port authority's board of directors and an area farmer. "River rises raised the water table, and back behind the levees people can expect to begin seeing some ponding."

The National Weather Service agrees with Mr. Blakley.

On Thursday, forecasters said that at 17 feet, lowland flooding occurs upstream and downstream from St. Joseph.

On Friday, the weather service said flooding continues to be likely in low-lying areas of Doniphan County, Kansas, and on the Missouri side in Andrew and Buchanan counties. Instead of cresting on Friday, the weather service said the river would continue rising, with a crest at 17.6 feet this afternoon. The Basin Forecast Center only projects Missouri River conditions for the next 24 hours; there is no prediction yet for next week.

"I don't see it going down anytime soon," said Ken Reeder, who owns land north of Heritage Park along the river. Mr. Reeder also serves as a committee member on the U.S. Army Corps of Engineers' Missouri River Recovery program.

And the corps announced Thursday that it wants more water in the Missouri River.

Gavins Point releases will be increased from 33,500 to 39,000 cubic feet per second beginning Monday, said Monique Farmer, an Omaha-based spokeswoman for the Corps. The release level will remain at 39,000 cubic feet per second for the remainder of the month, she said.

"That's going to make the Missouri a fast-rolling river," Mr. Blakley said.

Current forecasts call for additional chances of rain through Monday.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," stated Jody Farhat, Missouri River Basin Water Management chief at the Omaha office.

Yet, at the annual meeting of the Missouri River Levee and Drainage Districts Association in February, Mrs. Farhat said the corps would finish evacuating last year's stored flood water well before this year's spring flooding, Mr. Reeder said.

Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream

The melt of the Missouri River basin plains snowpack is nearly complete, but the mountain snowpack is 130 percent of normal and still rising. Since March 1 the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control pool. In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

I've cc'd Kansas City District H&H branch to see if they have any regulation flexibility, particularly in the operation of HS Trumann reservoir in Missouri.

For those who don't know her, Debbie Lee is my counterpart in charge of Water Management for LRD.

Let me know if you need any additional information.

Good luck.

Regards,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil
Office: 402-996-3840
Cell: 402-350-1417
Home: [REDACTED]

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM
To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP;
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED] LRL;
[REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED] NWD02; Farhat,
Jody S NWD02
Cc: Shadie, Charles E MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

All,

I need before 1030 ET tomorrow (Monday, Apr 24) the information requested by MG Peabody in item 2 below (parts 1 and 2). Pls provide an Excel spreadsheet that lists the reservoir in Column 1; travel time to Cairo in Column 2 in whole days; today's discharge in cfs; and minimum discharge achievable under current conditions in cfs.

My perspective that I will explain to the CG is that 1) we are past the decision window for those reservoirs in LRP and LRH and many in LRL with large travel times to contribute to flow reductions we will be initiating this week with the TVA and LRN reservoir systems; 2) at 2,000,000 cfs at the Ohio-Miss junction, even TVA and LRN's reductions will be relatively small; 3) we are already achieving most benefits of the upstream reservoirs due to their

normal flood control activities, 4) there is a highly defined plan for the MR&T that LRD/MVD are actively carrying out.

However, I must show the hard facts to support this perspective and your prompt response will be greatly appreciated.

That said, the CG has asked us to think outside the box. If you have suggestions please forward those as well. If any of the reservoirs outside of TVA and LRN can contribute actively to the lower Ohio-Miss flood fight, please advise me of the strategy.

LRD/LRN/TVA/MVD/NWS have been actively engaged in developing the flood control strategy since late last week. My team has worked tirelessly through the weekend and we appreciate the additional staffing from LRH and LRL. HEC and CRREL have also responded heroically, with Gary Brunner working with Tim Pangburn through the weekend to get the latest levee data into our Ohio River Community model and to initiate flood inundation mapping.

Jody, Kevin, Chuck,

I am 100% certain the CG will ask what the Upper Mississippi and Missouri can do to aid the flood fight. Pls respond with the requested information for your AOCs if you are able.

Regards,

Chief, Water Management Division

office

cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Peabody, John W MG LRDOR

Sent: Sunday, April 24, 2011 6:42 PM

To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED]

[REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;

DLL-CELRD-District Commanders

Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

ALL - The below is not intended to sound overly dramatic, but it is important we not underestimate the gravity of the impact of the weather forecast on river levels and the potential for massive flooding.

My over-arching guidance:

1. From this moment until a DTG TBD, flood preparations will take top priority over all other planned activities or events, to include the ACRCC, the Chief's Change of Responsibility, and any other pre-planned events.
2. The projected most likely flood event on the lower Ohio and lower Mississippi is likely to approach or exceed record levels. Depending on how the weather evolves in the next month, this event has the potential to reach epic proportions. Therefore we must do every single thing we possibly can do -- no matter how small or seemingly insignificant - to reduce the projected maximum crest at Cairo. This includes thinking well outside our normal procedures,

RICH - Thanks, I was on for nearly all of the call.

Tomorrow I need an hour-long session with WM and EM as a minimum at 1100 (we'll have to move the property accty session), to wargame actions we can start taking now to influence the

projected river crest at Cairo around 1 May and beyond. Specifically (but not all-inclusively) I'd like to cover the following:

1. Time for a crest under current flow conditions to move from Pittsburgh to Cairo;
2. Describe the maximum flow reductions achievable at all (each one) of our reservoirs in the entire Ohio Watershed basin.
3. Key LL's from other recent flood events (93, 97, 08, etc.).

It is essential that we pull out the stops to fight the peak river crest for this event.
Thx!

Best,
John P.

----- Original Message -----

From: [REDACTED] LRDOR
To: Peabody, John W MG LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02
Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; Landry, Keith A COL LRL; [REDACTED] LRL
Sent: Sun Apr 24 15:34:59 2011
Subject: FW: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

FOUO - THIS EMAIL CONTAINS SENSITIVE INFORMATION - PLEASE DO NOT RELEASE

Sir:

Just a few notes from our calls this afternoon. Participated in a phonecon at 1400 hours with MVM, MVD, LRD, and State and USCG reps from the MVD AO. The current forecast from NWS has resulted in MVD increasing their estimated crest at Cairo IL from 58.5 to 60.0 feet. The crest is estimated to occur on 3 May. MVM reported that their estimated crest accounts for the next 48 hours of rainfall but does not account for the full 5-day forecast. It also does not account for any reduction in the crest that we can achieve thru reduced outflow at Kentucky and Barkley.

Debbie Lee reported that our internal LRD model is showing a crest of 61 feet at Cairo IL based on current rainfall on the ground (not including the 5-day forecast). Our model does take into account a reduction of approximately 1.5 feet based on reduced outflow at Kentucky and Barkley beginning on 26 April.

CLOSE-HOLD: MVD has a detailed plan for commencing loading, launching, arrival, and the ultimate decision to exercise the explosives barge. They are following an MVD OPORD which discusses this process. They are also very sensitive about STRATCOMS regarding this plan and have included STRATCOMS, a press release, etc...into their plan. I am providing this info for you, but please do not release since MVD is working the STATCOMS.

25 Apr: 1900 hours, Commence Loading Barge and preparations to launch
26 Apr: 1900 hours, Launch
28 Apr: 0900 hours, Arrive onsite at Birds Point New Madrid and prep site

28 Apr: Midnight, Set-Off explosives

The next decision point for MG Walsh, as the MRC President, is Tuesday morning 26 Apr, when MG Walsh will make the decision on whether to prepare the fuse plug.

Once again - this is close hold and MVD is covering the STRATCOMS.

Concerning our plans for Kentucky and Barkley, we are continuing to draw down the lakes to increase storage capacity. Our plan is to initiate cutting the outflow on 26 Apr and continue with the reduced outflows until 6 May. Our estimate is that we can reduce the crest at Cairo by ~1.5 feet.

The next phonecon we had was at 1430 this afternoon with LRD districts and FEMA region 5. All districts are decisively engaged or actively monitoring the event. No significant concerns were reported in LRE, LRC, LRB, or LRP.

LRL: Reported that 6 lakes are nearing record pools. This includes Cave Run, Monroe, West Fork, Patoka, Taylorsville, and Harsha (aka East Fork). No significant concerns were noted with these lakes, there is still storage capacity available, and LRL is monitoring closely.

L/D 52 and 53 are not locking, but navigation is available over the wickets. Newburgh ceased locking today at 1600 hours. Navigation is still available over the fixed weir if the Coast Guard Waterways Action Plan constraints are met. Constraints include minimum horsepower requirements, a helper boat, etc... JT Meyers will cease locking sometime tonight but navigation will still be available over the fixed weir (same constraints apply).

The only big navigation concern at this point is McAlpine. The north chamber (old 1200 chamber) will cease locking tonight or tomorrow. The south chamber (new 1200 foot chamber) is expected to continue locking for the next several days, but is being monitored closely and may need to cease locking mid to late week (when the upper gage reaches 38'). If/when this happens it will stop navigation.

LRH: Water Management is monitoring the Muskingham basin closely and has not pulled the trigger yet on deploying their Geotech team.

The FEMA 5 Watch Officer reported no issues to discuss during our call.

Best Regards,
Rich Hancock

-----Original Message-----

From: [REDACTED] LRDOR

Sent: Sunday, April 24, 2011 3:44 PM

To: DLL-CELRD-Water Management Update

Subject: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Afternoon Water Management Update - 24 April 2011

Situational Review and Outlook:

Over the past 24 hours, showers and thunderstorms formed throughout the Division AOR. The heaviest rains fell on an axis running along the Ohio River between Cairo and Huntington, WV with 2 to 4 inch rain totals. Very heavy rain was observed in southern Missouri with

widespread 3 to 5 inch rain totals along the Mississippi between St. Louis and New Madrid. Rainfall in central Illinois, central Indiana and central Ohio was 0.25 inches to 1 inch. Rainfall in the Lake Erie and Ontario basins was less than an inch with mainly dry conditions for most of the Lake Michigan, Huron and Superior drainage areas.

Today, heavy rain and thunderstorms will continue to impact the Ohio Valley in the same areas along the Ohio River between Cairo, IL and Huntington, WV with the southern part of Missouri also receiving very heavy rain. Rainfall totals today through Monday morning are forecast to be 1 to 3 inches in northwestern Kentucky, southern Ohio, southern Indiana, southern Illinois and southern Missouri with locally higher amounts in thunderstorms. 0.25 to 1 inch rain is forecast today for northern Illinois, northern Indiana, Ohio, West Virginia and Pennsylvania.

Tomorrow, the rainfall axis will shift north and west. Indiana, southern Illinois and southern Missouri will continue to see the heaviest rainfall event with the shift. A break in the rainfall will occur for most of Kentucky, West Virginia, western Pennsylvania and the southeastern two thirds of Ohio. Rainfall totals of 1 to 3 inches are forecast for western New York, southern Michigan, most of Indiana and Illinois, far western Kentucky near the Barkley and Kentucky Dams, far western Tennessee near Memphis and southeastern Missouri.

Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %
Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %
Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %
Brookville	27.5 %
Nolin River	28.7 %

Nashville District:

Barkley	23.2 % (sloped pool storage)
Dale Hollow	28.7 %

TVA:

Kentucky Dam	22.0 % (sloped pool storage)
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Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather

Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

[REDACTED] NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 11:08 PM
To: Farhat, Jody S NWD02
Subject: Re: Missouri River Basin Update (UNCLASSIFIED)

Thanks, Jody. I am sorry to hear about your uncle's passing. Know that our thoughts and prayers are with you and your family. Please take whatever time you need--we'll be fine with [REDACTED]

Vr/John McMahon

PS. I think your option is a good one--will ask [REDACTED] if there are any others but go with this one assuming it makes the most sense. Thanks.

----- Original Message -----

From: Farhat, Jody S NWD02
To: McMahon, John R BG NWD
Cc: Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD;
[REDACTED] NWD02; [REDACTED] NWD02
Sent: Tue Apr 26 20:29:02 2011
Subject: RE: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Sir - we'll look at it and see what we can to. Perhaps a middle ground would be to continue up to the 45,000 this week, and then hold until the stage at Cairo falls below 60 feet. That would allow us to do something for the Mississippi while helping out the landowners in the Nebraska City to St. Joseph reach and still getting some flood evacuation started. This would also avoid the legal argument about operating the Mainstem System solely for the benefit of the Mississippi. In addition, if travel time is taken into consideration, it may not delay our come-up too long. I would recommend we make any offer of assistance contingent on the status of the Missouri since the situation seems to be worsening by the day.

On another note, my uncle passed away today so I will be out of the office tomorrow and Thursday. I plan to work from home for a couple hours tomorrow morning, and will be available by cell phone and bb email the remainder of the time. I plan to be on the Guidons call Thursday morning with the District commanders, but in the event I'm unavailable, I will have [REDACTED] take my place. [REDACTED] will be in charge of WM during my absence. You can contact him via email, office phone [REDACTED], or cell phone at [REDACTED]. [REDACTED] will also be available via email, office phone [REDACTED], or cell phone at [REDACTED]. Both are fully knowledgeable in all aspects of system regulation and stand ready to provide any assistance you need.

We'll follow up in the morning as to whether we think this plan is workable. If you have any preferences or suggestions, please pass them on asap so we can look at various alternatives before providing a firm recommendation before noon CST.

VR,
Jody

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:37 PM
To: Farhat, Jody S NWD02; [REDACTED] NWD02
Cc: Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD

Subject: Fw: Missouri River Basin Update (UNCLASSIFIED)

Jody:

Please look this over to see what if any incidental benefit opportunity there is here--would like some feedback by noon CST so I can participate in GEN Walsh's call fully informed.

Thanks.

Vr/John McMahon

----- Original Message -----

From: Walsh, Michael J MG MVD

To: McMahon, John R BG NWD; Peabody, John W MG LRDOR

Sent: Tue Apr 26 19:24:32 2011

Subject: Re: Missouri River Basin Update (UNCLASSIFIED)

John,

Great report. In regards to the flood way, it is reported that we will be at 60 on the Cairo gate for a long time perhaps past 12 may but my notes are in the office. I asked my HH guys to see if you can hold off until after we be below 60? HH guys working. This will be the longest the system will be under such a heavy load in ??? Perhaps ever. Any help in the out days will get us past the long stress on the project.

I will call tomorrow both you and brother Peabody after I fly the system and land in Mo and before the press event.

Mike

----- Original Message -----

From: McMahon, John R BG NWD

To: Van Antwerp, Robert L LTG HQ02; Walsh, Michael J MG MVD; Peabody, John W MG LRDOR

Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02;

[REDACTED] NWD; [REDACTED] NWD; Farhat, Jody S NWD02; Ruch, Robert J COL NWO;

Hofmann, Anthony J COL NWK; Tipton, Robert A Col NWD; [REDACTED] HQ02; [REDACTED]

NWD; [REDACTED] NWD; [REDACTED] NWD

Sent: Tue Apr 26 20:28:29 2011

Subject: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Chief:

We have been closely monitoring the evolving situation across the ENTIRE Mississippi River Watershed (the 3d largest in the world as [REDACTED] likes to refer to it) and wanted to update you and the other Div Engineers on the specifics of the situation in the Missouri Basin as options are considered and decisions are made.

1. The Missouri Basin typically endures 2 pulses of snowmelt and runoff each year--one in the plains in the March-April timeframe and one later in the early summer in May-July timeframe. We are generally finished with the first pulse and have been participating in various smaller floodfights at the district level which continue today--generally, these are going "well" as far as local flooding and suffering can go.

2. The snowpack melt is expected to approach record levels as it is still accumulating in the mountains--was 115% of Normal on 1 April, is 130% as of 25 April and projected to approach the record of 137% on 1 May (which was the 1997 record). This translates into a another BIG year of cautiously but aggressively evacuating the Missouri Mainstem System Storage as we did last year (2010) which as you may recall was exacerbated by untimely rains in the plans below Gavins Point Dam, the last point on the Mainstem from which we can regulate flows.

3. Since March 1, the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control zone (EFCZ). In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

4. Our current plans to evacuate the system (subject to change as we get the next forecasts o/a 1 May and finalize the next iteration of our Runoff Forecasts and Reservoir Forecasts next week), are to increase releases from Gavins Point from 33.5 Kcfs on Monday (25 April) to 36.5 Kcfs on Tues to 42 Kcfs on Wed to 45 Kcfs on Thursday, anticipating that we will likely need to increase releases even further once the next forecasts come out next week--these releases may increase up to 55 Kcfs early in May knowing what we know today. These increases are necessitated by the pool in each of the BIG 3 reservoirs at the upper end of the system as follows: Oahe--from inches away from being in the EFCZ on 25 April to +2 ft into the EFCZ; Garrison--from -4 feet to +2 feet into the EFCZ; and Fort Peck--from -4 feet to +2 feet into the EFCZ--our margin of safety and opportunity to regulate flow in quickly shrinking and we are acting now to address what portends to be a very high (if not record) year. We are also closely monitoring the ongoing work to repair levees that were damaged during last year's high water events in both NWO and NWK footprints.

5. As with our experience last summer, we are very sensitive to the downstream affects of these increases in release rates from Gavins Point and are monitoring the lower reaches of the system very carefully as we do. Obviously, given what is happening in LRD and MVD, we are equally concerned about the impacts to the Mississippi River. To that end, there is limited legal authority (if any) within the Missouri Basin to "operate [these] reservoirs to benefit interests on the Mississippi River" without invoking "extraordinary circumstance and considerations of extraordinary authority" at the HQUSACE level. Nonetheless, we are coordinating through our respective division River Management offices any "incidental" benefits that may possibly accrue from such coordination. These citations are from a Les Edelman legal opinion, written as Chief Counsel on 17 August 1990. That said, I seriously doubt we have much flexibility here given our predicament in the upper basin already.

6. By the way, there is a 10 day travel time component between Gavins Point and St Louis, with another 2+ days to Cairo, Ill. So even if we wanted to do something, the timing of the flows puts us past 8 May, several days past the current projected peak flow there at Cairo. We continue to stay engaged as this situation unfolds.

VR, John

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]

NWD; [REDACTED] NWD; [REDACTED] A NWD; [REDACTED] NWD; [REDACTED]

NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo. Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] and Kim Thomas (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

Kim indicated that all of NWO's priority areas on the riverside of the levees have been completed. Levee 550 is going to be the main levee of concern as they are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. [REDACTED] will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

[REDACTED] NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:37 PM
To: Farhat, Jody S NWD02; [REDACTED] NWD02
Cc: Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
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Sent: Tue Apr 26 19:24:32 2011
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From: McMahon, John R BG NWD
To: Van Antwerp, Robert L LTG HQ02; Walsh, Michael J MG MVD; Peabody, John W MG LRDOR
Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] NWD; [REDACTED] NWD; Farhat, Jody S NWD02; Ruch, Robert J COL NWO; Hofmann, Anthony J COL NWK; Tipton, Robert A Col NWD; [REDACTED] HQ02; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
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2. The snowpack melt is expected to approach record levels as it is still accumulating in the mountains--was 115% of Normal on 1 April, is 130% as of 25 April and projected to approach the record of 137% on 1 May (which was the 1997 record). This translates into a another BIG year of cautiously but aggressively evacuating the Missouri Mainstem System Storage as we did last year (2010) which as you may recall was exacerbated by untimely rains in the plans below Gavins Point Dam, the last point on the Mainstem from which we can regulate flows.

3. Since March 1, the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control zone (EFCZ). In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

4. Our current plans to evacuate the system (subject to change as we get the next forecasts o/a 1 May and finalize the next iteration of our Runoff Forecasts and Reservoir Forecasts next week), are to increase releases from Gavins Point from 33.5 Kcfs on Monday (25 April) to 36.5 Kcfs on Tues to 42 Kcfs on Wed to 45 Kcfs on Thursday, anticipating that we will likely need to increase releases even further once the next forecasts come out next week--these releases may increase up to 55 Kcfs early in May knowing what we know today. These increases are necessitated by the pool in each of the BIG 3 reservoirs at the upper end of the system as follows: Oahe--from inches away from being in the EFCZ on 25 April to +2 ft into the EFCZ; Garrison--from -4 feet to +2 feet into the EFCZ; and Fort Peck--from -4 feet to +2 feet into the EFCZ--our margin of safety and opportunity to regulate flow in quickly shrinking and we are acting now to address what portends to be a very high (if not record) year. We are also closely monitoring the ongoing work to repair levees that were damaged during last year's high water events in both NWO and NWK footprints.

5. As with our experience last summer, we are very sensitive to the downstream affects of these increases in release rates from Gavins Point and are monitoring the lower reaches of the system very carefully as we do. Obviously, given what is happening in LRD and MVD, we are equally concerned about the impacts to the Mississippi River. To that end, there is limited legal authority (if any) within the Missouri Basin to "operate [these] reservoirs to benefit interests on the Mississippi River" without invoking "extraordinary circumstance and considerations of extraordinary authority" at the HQUSACE level. Nonetheless, we are coordinating through our respective division River Management offices any "incidental" benefits that may possibly accrue from such coordination. These citations are from a Les Edelman legal opinion, written as Chief Counsel on 17 August 1990. That said, I seriously doubt we have much flexibility here given our predicament in the upper basin already.

6. By the way, there is a 10 day travel time component between Gavins Point and St Louis, with another 2+ days to Cairo, Ill. So even if we wanted to do something, the timing of the flows puts us past 8 May, several days past the current projected peak flow there at Cairo. We continue to stay engaged as this situation unfolds.

VR, John

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]

NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]

NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

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I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. Mike Swenson will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Tuesday, April 26, 2011 9:22 PM
To: Farhat, Jody S NWD02
Subject: Fw: Update since this morning's Missouri River call (UNCLASSIFIED)

If hope is NOT a strategy, what is prayer?

- [REDACTED]

[REDACTED]
[REDACTED]
402. [REDACTED] (Office)
402. [REDACTED] (BB)

Message sent via my BlackBerry Wireless Device

----- Original Message -----

From: McMahon, John R BG NWD
To: Hofmann, Anthony J COL NWK; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Ruch, Robert J COL NWO
Sent: Tue Apr 26 19:03:50 2011
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Thanks, Tony.

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Cc: Swenson, Michael A NWD02; Grode, Kevin R NWD02; Ruch, Robert J COL NWO
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Any questions, please let me know.
Tony

Building Strong!

Colonel Anthony J. Hofmann, PMP
Commander, Kansas City District
U.S. Army Corps of Engineers

Office: (816) 389-3202
Fax: (816) 389-2027
<http://www.nwk.usace.army.mil/>

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK; Ruch, Robert
J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Roger, Jody. Thanks.

Cdrs:

When do we anticipate levee repairs below to be completed?

Bob Tipton: what funding needs are still outstanding to complete on the Missouri? What is
status/expectation of funding from HQs?

Thanks.

VR, John McMahon

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NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

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Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:06 PM
To: Ruch, Robert J COL NWO; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: Swenson, Michael A NWD02; Grode, Kevin R NWD02; Hofmann, Anthony J COL NWK
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Roger all, Bob. Thanks.
With the FY11 Work Plan coming into focus, Bob Tipton tells me we will have better visibility on what to expect on the FCCE funding front...if anything. More to follow.
VR/ John McMahon

-----Original Message-----

From: Ruch, Robert J COL NWO
Sent: Tuesday, April 26, 2011 3:10 PM
To: McMahon, John R BG NWD; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Sir,

The bottom line is that we are buttoned up and ready for high water. Along the Missouri mainstem, there are two levee rehabs ongoing (L611-614 and L550). I feel pretty good about the current status as we have completed the riverside work as scheduled prior to 01 March. The remaining concern is L-550 seepage issue we saw during last year's flood event. We are continuing to mitigate those issues with placement of seepage berms and relief wells. If L-550 has water against the levee again this year for an extended period of time, there will be extensive monitoring required as well as possible temporary emergency measures. Even under current conditions it is sloppy behind those levees and really has remained that way for the past year.

L-611-614 is not of concern as water does not tend to stay on the levee for extended periods of time like it does on L-550 which sits at the bottleneck of the Missouri River above Rulo, NE. There are areas of newly placed levee that do not have substantial sod cover to protect against erosion that may need to be protected by other means in an emergency situation. Both levees are scheduled to be physically complete by 01 December 2011.

We have five Priority 2 levees that are unlikely to be funded and that does not cause me great concern based on our current risk assessments. The problem is that we are likely to see new Priority 1 projects come out of this year's expected high water and we will never get to the lower priority levees.

I think we will cover status of levee repair in some detail at the PRB later this week.

V/R,

COL Bob Ruch
Commander
Omaha District, USACE
(402) 995-2001
<https://www.nwo.usace.army.mil/>

-----Original Message-----

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK; Ruch, Robert
J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

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Caveats: NONE

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[REDACTED] NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:04 PM
To: Hofmann, Anthony J COL NWK; Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] A NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Ruch, Robert J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

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Colonel Anthony J. Hofmann, PMP
Commander, Kansas City District
U.S. Army Corps of Engineers

Office: (816) 389-3202
Fax: (816) 389-2027
<http://www.nwk.usace.army.mil/>

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Sent: Tuesday, April 26, 2011 9:36 AM

To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK; Ruch, Robert
J COL NWO

Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Roger, Jody. Thanks.

Cdrs:

When do we anticipate levee repairs below to be completed?

Bob Tipton: what funding needs are still outstanding to complete on the Missouri? What is status/expectation of funding from HQs?

Thanks.

VR, John McMahon

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo. Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] and Kim Thomas (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

Kim indicated that all of NWO's priority areas on the riverside of the levees have been completed. Levee 550 is going to be the main levee of concern as they are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. Mike Swenson will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Mrs. Farhat.

The National Weather Service continues to issue flash-flood warnings from Jefferson City eastward along the Missouri River and southward below St. Louis on the Mississippi River.

Marshall White can be reached at marshall.white@newspressnow.com.

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Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Tuesday, April 26, 2011 4:20 PM
To: Farhat, Jody S NWD02; [REDACTED] NWD02
Subject: RE: Voice Message from Unknown (8162718500) (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

I talked to him.

[REDACTED]
[REDACTED]
Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

-----Original Message-----
From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 3:26 PM
To: [REDACTED] NWD02; [REDACTED] NWD02
Subject: Fw: Voice Message from Unknown (8162718500)

Can one of you give marshall white from st joe news press a call back.

Jody

----- Original Message -----
From: Unity Messaging System - NWOUNITY1
To: Farhat, Jody S NWD02
Sent: Tue Apr 26 13:20:02 2011
Subject: Voice Message from Unknown (8162718500)

Classification: UNCLASSIFIED
Caveats: NONE

From: Marshall White [marshall.white@newspressnow.com]
Sent: Tuesday, April 26, 2011 3:28 PM
To: Farhat, Jody S NWD02
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

back in the office call me at that 271-8646 number

Marshall

----- Original Message -----

From: "Jody S NWD02 Farhat" <Jody.S.Farhat@usace.army.mil>
To: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>, "Marshall White" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 11:00:36 PM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall - I'm on travel Monday night and Tuesday. If you'd like I can try to give you a call tomorrow afternoon after my meeting. The number I have is 816-271-8646. Is that correct?

Just some background information for your use:

2011 is lining up to be one of the wettest years on record.

Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water in the mainstem reservoir system due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is currently at the base of the exclusive zone. Fort Peck and Garrison are well into their annual flood control zones and are forecast to enter their respective exclusive flood control zones when the mountain snowpack melt begins.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water.

We'll have a better idea just how high when the studies are done next Tuesday, May 2nd. This may end up being one of the wettest years on record, quite similar to 1997 if you have a good memory.

I don't know if you want to do a story now, or wait for the updated studies early next week. The numbers will be more firm early next week, but we are getting quite a few calls from folks in your area.

I'll give you a call late tomorrow afternoon when my meeting is over, but I will be available by email during the day if you have questions.

Regards,
Jody

-----Original Message-----

From: Farmer, Monique L NWO
Sent: Monday, April 25, 2011 11:22 AM
To: 'Marshall White'
Cc: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Marshall:

Will do.

Thanks,

MF

-----Original Message-----

From: Marshall White [mailto:marshall.white@newspressnow.com]
Sent: Monday, April 25, 2011 11:20 AM
To: Farmer, Monique L NWO
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

No intent to declare unnecessary, just a question about timing with the river on the rise. As Jody said, you have enough storage for this year. So the question is, is this the best time to be releasing water? Below Jefferson City all the way to St. Louis the river is causing problems and then there is the Mississippi south of St. Louis all the way down to Memphis. Have Jody call me and maybe we can do another story talking about it.

Marshall

----- Original Message -----

From: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>
To: "marshall white" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 9:54:49 AM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Good morning Marshall:

Hope you had a good weekend. I just wanted to clarify something in the article below which was picked up by Water Environment Research and lists you as the contact. The article seems to convey to the reader that it is unnecessary for the Corps to evacuate floodwaters stored in the Missouri main stem system right now because all of that floodwater was evacuated prior to the start of the runoff season, which begins March 1 (see paragraphs 10-11). It is true that we evacuated more than 9 million acre-feet of water prior to the start of the runoff season in order to be prepared for any potential flooding we might face this year. The

important thing to remember is that we began the runoff season with all of our flood control storage available.

Then, we began to receive runoff from plains snowpack early this year (in February). Therefore, we were already accumulating additional water into the system as early as February. We must evacuate that water as soon as possible in order to be prepared for what is forecast to take place from April through June. We consistently monitor downstream conditions and time our increases to match the declines in the tributaries so that we are coming in behind crests as opposed to adding to any lowland flooding downstream.

Hope this helps and as always, please call us with any questions.

Very respectfully,

Monique Farmer/Sr. Public Affairs Specialist Omaha District, U.S. Army Corps of Engineers
Office: (402) 995-2420

Blackberry: (402) 779-1460

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<http://www.nwo.usace.army.mil>

Water Environment Research

Alexandria, VA

04/24/2011

Industry News - Missouri River on the rise

April 23--The National Weather Service and the Missouri River Basin Forecast Center at Pleasant Hill have had flood warnings posted for several days, saying St. Joseph is in danger of low-level flooding.

"The ground is pretty well saturated," said Ron Blakley, a member of the local port authority's board of directors and an area farmer. "River rises raised the water table, and back behind the levees people can expect to begin seeing some ponding."

The National Weather Service agrees with Mr. Blakley.

On Thursday, forecasters said that at 17 feet, lowland flooding occurs upstream and downstream from St. Joseph.

On Friday, the weather service said flooding continues to be likely in low-lying areas of Doniphan County, Kansas, and on the Missouri side in Andrew and Buchanan counties. Instead of cresting on Friday, the weather service said the river would continue rising, with a crest at 17.6 feet this afternoon. The Basin Forecast Center only projects Missouri River conditions for the next 24 hours; there is no prediction yet for next week.

"I don't see it going down anytime soon," said Ken Reeder, who owns land north of Heritage Park along the river. Mr. Reeder also serves as a committee member on the U.S. Army Corps of Engineers' Missouri River Recovery program. And the corps announced Thursday that it wants more water in the Missouri River.

Gavins Point releases will be increased from 33,500 to 39,000 cubic feet per second beginning Monday, said Monique Farmer, an Omaha-based spokeswoman for the Corps. The release level will remain at 39,000 cubic feet per second for the remainder of the month, she said.

"That's going to make the Missouri a fast-rolling river," Mr. Blakley said.

Current forecasts call for additional chances of rain through Monday.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," stated Jody Farhat, Missouri River Basin Water Management chief at the Omaha office.

Yet, at the annual meeting of the Missouri River Levee and Drainage Districts Association in February, Mrs. Farhat said the corps would finish evacuating last year's stored flood water well before this year's spring flooding, Mr. Reeder said.

Mr. Blakley wondered why it is still necessary to be releasing last year's flood water into the basin. The corps maintained that its releases take into account current conditions.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Mrs. Farhat.

The National Weather Service continues to issue flash-flood warnings from Jefferson City eastward along the Missouri River and southward below St. Louis on the Mississippi River.

Marshall White can be reached at marshall.white@newspressnow.com.

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Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED

[REDACTED] NWO

From: [REDACTED] NWO
Sent: Tuesday, April 26, 2011 3:08 PM
To: [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: Re: Fort Randall Releases (UNCLASSIFIED)

[REDACTED]
Lana Gravest (YST) raised the concern regarding the levels coming up and potential flooding. Last year the Tribe took a big hit due to a mix of high flows and a large amount of rain in a very short time frame.....[REDACTED]

Message sent via my BlackBerry Wireless Device

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02; [REDACTED] NWO
Sent: Tue Apr 26 12:25:41 2011
Subject: Fort Randall Releases (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Jody/[REDACTED]

[REDACTED] said that there was a question at the tribal meeting regarding the Fort Randall releases. FYI - Fort Randall releases have been stepped upped from 25 kcfs on Friday to 32.5 kcfs yesterday. This afternoon, releases were increased to 41 kcfs which includes approximately 4 kcfs from the spillway. They will likely remain near that rate until further adjustments are made from Gavins Point.

Let me know if you have any questions.

[REDACTED]
Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Tuesday, April 26, 2011 2:26 PM
To: Farhat, Jody S NWD02; [REDACTED] NWO
Subject: Fort Randall Releases (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody [REDACTED]
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[REDACTED]

Classification: UNCLASSIFIED
Caveats: NONE

From: Marshall White [marshall.white@newspressnow.com]
Sent: Tuesday, April 26, 2011 11:19 AM
To: Farhat, Jody S NWD02
Subject: Re: Mo. River on the rise article (UNCLASSIFIED)

Jody, I have to be in court this afternoon to cover a hearing. Send me your cell and I'll call you when I get out.

Concerned the new increases could cause flooding down river. First question will be about the St. Joseph area. Next question will be about Jefferson City to St. Louis, then the Mississippi south of St. Louis. Also, want to talk about capacity. You indicated in Feb. that there was sufficient, Mother Nature seems to be damming you.

Marshall

----- Original Message -----

From: "Jody S NWD02 Farhat" <Jody.S.Farhat@usace.army.mil>
To: "Monique L NWO Farmer" <Monique.L.Farmer@usace.army.mil>, "Marshall White" <marshall.white@newspressnow.com>
Sent: Monday, April 25, 2011 11:00:36 PM
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

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Cc: Farhat, Jody S NWD02
Subject: RE: Mo. River on the rise article (UNCLASSIFIED)

Classification: UNCLASSIFIED
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Marshall:

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Thanks,

MF

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Caveats: NONE

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Blackberry: (402) 779-1460
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Water Environment Research
Alexandria, VA
04/24/2011

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Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Tuesday, April 26, 2011 10:43 AM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD
Subject: Letter from State Engineer-State of North Dakota (UNCLASSIFIED)
Attachments: State of North Dakota Ltr.-April 20, 2011.pdf

Classification: UNCLASSIFIED
Caveats: FOUO

Good Morning,

Attached is the subject letter, dated April 20, 2011, concerning "High Missouri River System Reservoir Levels" for your review. The letter was also given to Dave Ponganis.

Best Regards,

[REDACTED]
Executive Secretary
U.S. Army Corps of Engineers
1125 NW Couch Street, Suite 500
Portland, OR 97209
Ph: [REDACTED]

Attachment Classification: UNCLASSIFIED
Attachment Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO



State of North Dakota

Office of the State Engineer

900 EAST BOULEVARD AVE. • BISMARCK, ND 58505-0850
701-328-2750 • FAX 701-328-3696 • <http://swc.nd.gov>

April 20, 2011

Brigadier General John R. McMahon
Commander and Division Engineer
U.S. Army Corps of Engineers
1125 NW Couch St., Suite 500
Portland, OR 97209

RE: High Missouri River System Reservoir Levels

Dear Brigadier General McMahon:

I am concerned with the high levels of Lake Sakakawea and Lake Oahe, and the above normal snowpack that will be generating a great deal of additional runoff. We are concerned your forecast does not adequately address the current conditions in the basin and the potential for above normal precipitation this summer.

As of April 20, Lake Oahe had the second highest daily April elevation of 1616.8 feet, only to be exceeded in April 1997; and Lake Sakakawea had the third highest daily April elevation of 1845.1 feet, surpassed by April of 1972, and 1997. The mountain snowpack is well above average at 114% and the plains spring runoff is currently ongoing. The downstream discharges seem low compared to the mountain snowpack, and the current availability of flood storage.

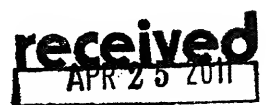
I ask the Corps to limit the usage of the exclusive flood pools to only when absolutely necessary. We urge the Corps to be cognizant of impacts that high releases out of the dams have on channel erosion, and encourage the Corps to have enough foresight so the evacuation of water can be made in an orderly fashion and limit unnecessary peaking. I also ask the Corps to review the runoff forecast and ensure its accuracy.

I thank you for taking my concerns under consideration.

Sincerely,

Todd Sando, P.E.
State Engineer

TS:BE:KC:mmmb/1392



NWO

From: McMahon, John R BG NWD
Sent: Tuesday, April 26, 2011 9:36 AM
To: Farhat, Jody S NWD02; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
K NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD;
[REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Hofmann, Anthony J COL NWK;
Ruch, Robert J COL NWO
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Roger, Jody. Thanks.

Cdrs:

When do we anticipate levee repairs below to be completed?

Bob Tipton: what funding needs are still outstanding to complete on the Missouri? What is status/expectation of funding from HQs?

Thanks.

VR, John McMahon

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:27 PM
To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Sir - a couple updates since this morning's call.

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VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Tuesday, April 26, 2011 9:04 AM
To: Farhat, Jody S NWD02
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody - thx and good reports all last evening.

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:27 PM
To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED]
NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
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Cell: 402-350-1417

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: William Lay [wlay@[REDACTED]]
Sent: Tuesday, April 26, 2011 8:25 AM
To: Farhat, Jody S NWD02
Subject: Re: River (UNCLASSIFIED)

Dear Jody,

We are between a rock and a hard place.

Here are my figures:

April 6th	Fort Peck	Garrison	Oahe	System
Base Exclusive	2,246.0	1,850.0	1,617.0	68.4
April 6th	2,239.3	1,841.6	1,615.5	62.6
Base FC	2,234.0	1,837.5	1,607.5	56.8
April 25th	2,240.4	1,846.1	1,617.0	65.1

April 6th				
A FC Pool	12	12.5	9.5	11.6
In pool	5.3	4.1	8	5.8
% filled	44.17%	32.80%	84.21%	50.00%

April 25th				
A FC Pool	12	12.5	9.5	11.6
In Pool	6.4	8.6	9.5	8.3
April 25th	53.33%	68.80%	100.00%	71.34%

Since April 6th we have raised from 50% of the flood control storage to 71.34% of the flood control storage. A right dramatic rise in 20 days.

Based on normal inflows we have only received 45% of the water and should have the additional 55% of the water come in by August. There probably won't be too much storage left after that gets in.

Bill

On Apr 25, 2011, at 11:13 PM, Farhat, Jody S NWD02 wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Bill,

Thanks for the email. We are watching river conditions on the lower Missouri River closely. Unfortunately we're between a rock and a hard place on the Missouri River this year.

Despite the fact that all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

The mountain snowpack is currently 130 percent of normal and still rising.

Oahe is at the base of the exclusive zone, and Fort Peck and Garrison are forecast to enter their respective exclusive flood control zones when the mountain snowpack melts.

In other words, we must begin evacuating flood waters from the mainstem system asap.

Our plan is to increase Gavins Point releases from 33,500 cfs earlier today to 45,000 cfs by Thursday. We intend to hold that rate until we update our monthly runoff forecast and reservoir regulation studies next Monday and Tuesday. Our current estimate is that we will need to be on a 50-60,000 cfs release from now through December to evacuate all the stored flood water. This may end up being one of the wettest years on record.

Sorry I don't have any better news. I intend to brief this situation at the MRRIC meeting next week. Let me know if you have any questions.

See you next week.

Jody

-----Original Message-----

From: William Lay [mailto:wlay@]

Sent: Monday, April 25, 2011 9:38 AM

To: Farhat, Jody S NWD02

Subject: River

Dear Jody,

You might want to hold up on letting out more water.

Bill

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 12:27 AM
To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
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VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 10:29 PM
To: Randy Asbury
Cc: Farhat, Jody S NWD02
Subject: RE: Missouri River News - April 25, 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Randy,

Thanks for the email. We are watching river conditions on the lower Missouri River closely and have coordinated with the Corps' Mississippi Valley Division and Lakes and Rivers Division on the situation on the Mississippi. Unfortunately there's very little we can do. The Mississippi River at Cairo is forecast to crest near 61 feet on May 3rd.

Our current legal interpretation of the 44 FCA is that we are not authorized to regulate the mainstem system solely for the benefit of the Mississippi River. Even if we could, it would take 10 days travel time from Gavins Point to the mouth, and several more days to get to the critical reach near Cairo.

In addition we have critical issues in the Missouri River basin. Despite the fact all of last year's flood waters were evacuated from the reservoir system, we have already gained over 8 MAF of flood water due to the melt of the plains snowpack. To put that in perspective, at the peak last year we had 9.1 MAF of stored flood waters in the system.

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Sorry I don't have any better news. I intend to brief this situation at the MRRIC meeting next week. Let me know if you have any questions.

Regards,
Jody

-----Original Message-----

From: Randy Asbury [mailto:moriver@howardelectricwb.com]
Sent: Monday, April 25, 2011 5:52 PM
To: Farhat, Jody S NWD02
Subject: FW: Missouri River News - April 25, 2011

Jody:

I realize the Gavins Point releases are insignificant in relation to what's happening on the Mississippi. In spite of that, any consideration you could give to releases in the next few days would likely be appreciated by stakeholders in the lower basin. Just a thought.

Thank you for your consideration.

Sincerely,

Randy Asbury

From: Gary Marshall [mailto:GMarshall@mocorn.org]
Sent: Monday, April 25, 2011 11:14 AM
To: Randy Asbury
Subject: RE: Missouri River News - April 25, 2011

Randy we're hearing the Corps is thinking about flooding the Birds Point levee in New Madrid and Mississippi counties to relieve pressure on the Ohio river near Cairo, Il. This would flood over 131,000 acres of prime Missouri farmland which lies in that area. Low laying areas near Cairo and all along the levee area already flooding. It's our hope they would allow this natural relief to occur rather than creating a "man made" scenario which might not work.

Blowing that levee was tried back in the 1920's and did not work. There is no reason to think it would be different now. I know this isn't a Missouri river issue, but knowing the Corps is thinking about increasing releases on the upper Missouri will only add to a already miserable situation down river everywhere. Just keeping you in the loop. G

Gary D. Marshall

Chief Executive Officer

Missouri Corn Growers Association

Missouri Corn Merchandising Council

3118 Emerald Lane

Jefferson City, MO 65109

573/893-4181

573/893/4612 - Fax

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From: Randy Asbury [mailto:moriver@howardelectricwb.com]
Sent: Monday, April 25, 2011 10:44 AM
To: Randy Asbury
Subject: Missouri River News - April 25, 2011

Corps' clippings are attached.

-----Original Message-----

From: Ernest.Perry@modot.mo.gov [mailto:Ernest.Perry@modot.mo.gov]
Sent: Thursday, April 21, 2011 1:53 PM
Subject: Missouri River Navigation Action Meeting! - Agenda and Final Reminder

Good afternoon all: We hope to see you next Thursday at Rocheport for the

Missouri River Navigation Action Meeting. We have poured through the commodity data, visited with everyone in the industry we could find, and reviewed reams of analysis to take a hard look at the freight navigation market and market potential for the Missouri River. And you who work with the river know what the data and analysis has told us - The Outlook for Freight Navigation on the Missouri River is Excellent and Getting Better!

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See you next week! An agenda is attached.

(See attached file: RocheportAgenda11m04d20.pdf) Missouri River Navigation Action Meeting

9 am -2:30 pm

Thursday, April 28, 2011

Les Bourgeois Restaurant

800-690-1830

14020 W. Highway BB

Rocheport, MO 65279

Thank you for participating in this important event!

Ernie

Ernest B. Perry, Ph.D.

Freight Development Administrator

MoDOT

573-526-5578

For Immediate Release: April 21, 2011

Contact: Monique Farmer - (402) 995-2420

monique.l.farmer@usace.army.mil

Corps to increase releases out of Fort Randall, Gavins Point Dam

OMAHA, Neb.—The U.S. Army Corps of Engineers announced today that releases from Fort Randall Dam and Gavins Point Dam will be gradually increased beginning early next week.

"The increased releases are necessary to continue evacuating flood water stored in the Missouri River main stem reservoir system," said Jody Farhat, Chief of the Missouri River Basin Water Management Office in Omaha.

"Our increases will be timed to match the declines in the tributaries, which enter the Missouri River just below Gavins Point Dam. As always, we will continue to monitor downstream conditions to determine whether any adjustments to the planned releases are necessary in the days to come," said Farhat.

Gavins Point releases will be increased from 33,500 to 39,000 cfs cubic feet per second (cfs) beginning on Monday, April 25. They will remain at 39,000 for the remainder of the month. Fort Randall releases will be gradually increased to approximately 35,000 in order maintain the Gavins Point pool at a normal elevation. The spillways at Gavins Point and Fort Randall will be used for the additional releases. Boaters and recreationists should exercise caution in the area around the spillways and remain clear of the buoys.

###

From: Blair, Amy E NWK [mailto:Amy.E.Blair@usace.army.mil]

Sent: Thursday, April 21, 2011 3:25 PM

To: Blair, Amy E NWK

Cc: Missouri River Recovery Admin Record

Subject: April 2011 MRRP Bulletin (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

MRRP bulletin - April 2011

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<http://www.moriverrecovery.org/mrrp/f?p=136:4>

If you received this e-mail in a forward from a friend and would like to receive it directly, please join our website ListServ:

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<<mailto:Amy.E.Blair@usace.army.mil?subject=Remove%20From%20List>>

Amy E. Blair

Outreach Specialist

Kansas City District,

U.S. Army Corps of Engineers

Office: 816-389-3393

Cell: 816-728-3651

Amy.E.Blair@usace.army.mil

From: [REDACTED] NWK [[mailto:\[REDACTED\]@usace.army.mil](mailto:[REDACTED]@usace.army.mil)]

Sent: Wednesday, April 20, 2011 6:59 AM

To: [REDACTED] NWK

Subject: Public Notice Announcement - U.S. Army Corps of Engineers, Kansas City District

Public Notice No. 2009-1740 <<http://www.nwk.usace.army.mil/regulatory/CurrentPN/2009-1740.pdf>> :

Applicant - Steve Lee

Activity - Berm Construction

County, State - Chariton County, Missouri

Public Notice Comment Period Expires on May 11, 2011

The above public notice has also been posted at
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Executive Director

Coalition to Protect the Missouri River (CPR)

4849 Hwy B

Higbee, MO 65257

660-273-9903 Phone

573-823-7906 Cell

636-594-8401 Fax

moriver@howardelectricwb.com

www.ProtectTheMissouri.com <<http://www.protectthemissouri.com/>>

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NWO

From: Farhat, Jody S NWD02
Sent: Wednesday, April 27, 2011 8:25 AM
To: [REDACTED] NWD02; [REDACTED] NWD02
Subject: FW: LRD Commander's Guidance (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

-----Original Message-----

From: [REDACTED] MVD
Sent: Wednesday, April 27, 2011 12:16 AM
To: Farhat, Jody S NWD02
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Jody,
Burning the midnight oil tonight and needed to send this to you.,

I appreciate your note yesterday and the constraints you have with respect to the reservoirs in your AOR. However, due to the situation we currently have, I need to ask you to review any options one more time and, if possible, "sharpen the pencil."

Current Situation:

- 1) NWS Forecast for Cairo is 60.5 feet (gage height) peak on or about 1 May. This will be a new record stage at that location and our levees have not had this much water against them before. Also, they project the stage will be above 60 from 28 April thru at least 6 May.
- 2) While the rain is expected to stop late Wed thru Friday, NWS does expect additional rainfall this weekend and again next week. While this may not increase the ultimate peak at Cairo, the probability of prolonged durations at these higher stages is increasing.
- 3) I have directed MVS and MVR to reduce reservoir releases in their AOR to reduce the peak flow that will occur at Cairo and to help reduce the higher stages.
- 4) Every 50k to 60k cfs is about one foot of stage at Cairo, so relatively minor flow reductions (total flow expected to be 2 million or more) can help.
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I talked with [REDACTED] last Friday and he explained NWD's existing flood concerns which you mentioned below, particularly with the Mainstem Reservoirs. We didn't discuss the tributary reservoirs much, so not sure if your districts have been able to identify any potential cutbacks. Also, I realize that the travel time is too long to impact the peak flows but if the hydrograph stays high for a week or more, reductions on the backside of the peak would be very beneficial.

Anyway, please take another look at any possible release reductions you might be able to effect and/or identify the pros and cons (impacts). I will try to call you Wed morning but I have to go on a flyover with MG Walsh over the flood area. As you can imagine there are

significant stakeholders looking at the Corps to do everything in our power to prevent operating this floodway, particularly the state of Missouri and the citizens in the floodway. At a minimum, we need to be able to reassure the stakeholders that we have considered all possible physical options and be able to explain the impacts of those options and why they can't be implemented.

One last question on your note below. Does the authorizing language specifically prohibit operating the reservoirs for the benefit of the Mississippi River or prioritize the Missouri interests? I haven't seen the language but most of our reservoirs don't have any prohibition on helping areas downstream not originally envisioned as long as there are no adverse impacts to the authorized purposes.

Thanks and hope to talk to you Wed.

[REDACTED]
Chief, Watershed Division
Mississippi Valley Division, USACE
1400 Walnut Street, Vicksburg, MS 39181-0080
Office: [REDACTED] Fax: [REDACTED]
Blackberry: [REDACTED]

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 9:11 AM
To: [REDACTED] LRDOR
Cc: [REDACTED] NWD02; [REDACTED] MVD; [REDACTED] NWK; [REDACTED] NWK;
[REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; Tipton, Robert A Col NWD;
McMahon, John R BG NWD; [REDACTED] NWD; [REDACTED] NWD
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Debbie - as I'm sure you know, our authorizing legislation does not allow the Corps to operate the Missouri River Mainstem Reservoir System solely for the benefit of the Mississippi River.

That said, our current releases from the most downstream of the mainstem dams, Gavins Point, are currently being scheduled at 33,500 cfs. Travel time from Gavins Point to St. Louis is approximately 10 days. Releases are scheduled to increase to 39,000 cfs early this week due to the need to evacuate flood waters from the mainstem reservoir system.

The melt of the Missouri River basin plains snowpack is nearly complete, but the mountain snowpack is 130 percent of normal and still rising. Since March 1 the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a foot below the exclusive flood control pool. In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

I've cc'd Kansas City District H&H branch to see if they have any regulation flexibility, particularly in the operation of HS Trumann reservoir in Missouri.

For those who don't know her, Debbie Lee is my counterpart in charge of Water Management for LRD.

Let me know if you need any additional information.

Good luck.

Regards,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil
Office: 402-996-3840
Cell: 402-350-1417
Home: [REDACTED]

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM
To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP;
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED] LRL;
[REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED] NWD02; Farhat,
Jody S NWD02
Cc: [REDACTED] MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

All,

I need before 1030 ET tomorrow (Monday, Apr 24) the information requested by MG Peabody in item 2 below (parts 1 and 2). Pls provide an Excel spreadsheet that lists the reservoir in Column 1; travel time to Cairo in Column 2 in whole days; today's discharge in cfs; and minimum discharge achievable under current conditions in cfs.

My perspective that I will explain to the CG is that 1) we are past the decision window for those reservoirs in LRP and LRH and many in LRL with large travel times to contribute to flow reductions we will be initiating this week with the TVA and LRN reservoir systems; 2) at 2,000,000 cfs at the Ohio-Miss junction, even TVA and LRN's reductions will be relatively small; 3) we are already achieving most benefits of the upstream reservoirs due to their normal flood control activities, 4) there is a highly defined plan for the MR&T that LRD/MVD are actively carrying out.

However, I must show the hard facts to support this perspective and your prompt response will be greatly appreciated.

That said, the CG has asked us to think outside the box. If you have suggestions please forward those as well. If any of the reservoirs outside of TVA and LRN can contribute actively to the lower Ohio-Miss flood fight, please advise me of the strategy.

LRD/LRN/TVA/MVD/NWS have been actively engaged in developing the flood control strategy since late last week. My team has worked tirelessly through the weekend and we appreciate the additional staffing from LRH and LRL. HEC and CRREL have also responded heroically, with Gary Brunner working with Tim Pangburn through the weekend to get the latest levee data into our Ohio River Community model and to initiate flood inundation mapping.

Jody, [REDACTED],

I am 100% certain the CG will ask what the Upper Mississippi and Missouri can do to aid the flood fight. Pls respond with the requested information for your AOCs if you are able.

Regards,

Chief, Water Management Division

office

cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Peabody, John W MG LRDOR

Sent: Sunday, April 24, 2011 6:42 PM

To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED]

[REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;
DLL-CELRD-District Commanders

Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

ALL - The below is not intended to sound overly dramatic, but it is important we not underestimate the gravity of the impact of the weather forecast on river levels and the potential for massive flooding.

My over-arching guidance:

1. From this moment until a DTG TBD, flood preparations will take top priority over all other planned activities or events, to include the ACRCC, the Chief's Change of Responsibility, and any other pre-planned events.
2. The projected most likely flood event on the lower Ohio and lower Mississippi is likely to approach or exceed record levels. Depending on how the weather evolves in the next month, this event has the potential to reach epic proportions. Therefore we must do every single thing we possibly can do -- no matter how small or seemingly insignificant - to reduce the projected maximum crest at Cairo. This includes thinking well outside our normal procedures,

RICH - Thanks, I was on for nearly all of the call.

Tomorrow I need an hour-long session with WM and EM as a minimum at 1100 (we'll have to move the property accty session), to wargame actions we can start taking now to influence the projected river crest at Cairo around 1 May and beyond. Specifically (but not all-inclusively) I'd like to cover the following:

1. Time for a crest under current flow conditions to move from Pittsburgh to Cairo;
2. Describe the maximum flow reductions achievable at all (each one) of our reserviors in the entire Ohio Watershed basin.
3. Key LL's from other recent flood events (93, 97, 08, etc.).

It is essential that we pull out the stops to fight the peak river crest for this event.
Thx!

Best,
John P.

----- Original Message -----

From: [REDACTED] LRDOR

To: [REDACTED] MG LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; Stockton, Steven L HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; Landry, Keith A COL LRL; [REDACTED] LRL

Sent: Sun Apr 24 15:34:59 2011

Subject: FW: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

FOUO - THIS EMAIL CONTAINS SENSITIVE INFORMATION - PLEASE DO NOT RELEASE

Sir:

Just a few notes from our calls this afternoon. Participated in a phonecon at 1400 hours with MVM, MVD, LRD, and State and USCG reps from the MVD AO. The current forecast from NWS has resulted in MVD increasing their estimated crest at Cairo IL from 58.5 to 60.0 feet. The crest is estimated to occur on 3 May. MVM reported that their estimated crest accounts for the next 48 hours of rainfall but does not account for the full 5-day forecast. It also does not account for any reduction in the crest that we can achieve thru reduced outflow at Kentucky and Barkley.

Debbie Lee reported that our internal LRD model is showing a crest of 61 feet at Cairo IL based on current rainfall on the ground (not including the 5-day forecast). Our model does take into account a reduction of approximately 1.5 feet based on reduced outflow at Kentucky and Barkley beginning on 26 April.

CLOSE-HOLD: MVD has a detailed plan for commencing loading, launching, arrival, and the ultimate decision to exercise the explosives barge. They are following an MVD OPORD which discusses this process. They are also very sensitive about STRATCOMS regarding this plan and have included STRATCOMS, a press release, etc...into their plan. I am providing this info for you, but please do not release since MVD is working the STATCOMS.

25 Apr: 1900 hours, Commence Loading Barge and preparations to launch

26 Apr: 1900 hours, Launch

28 Apr: 0900 hours, Arrive onsite at Birds Point New Madrid and prep site

28 Apr: Midnight, Set-Off explosives

The next decision point for MG Walsh, as the MRC President, is Tuesday morning 26 Apr, when MG Walsh will make the decision on whether to prepare the fuse plug.

Once again - this is close hold and MVD is covering the STRATCOMS.

Concerning our plans for Kentucky and Barkley, we are continuing to draw down the lakes to increase storage capacity. Our plan is to initiate cutting the outflow on 26 Apr and continue with the reduced outflows until 6 May. Our estimate is that we can reduce the crest at Cairo by ~1.5 feet.

The next phonecon we had was at 1430 this afternoon with LRD districts and FEMA region 5. All districts are decisively engaged or actively monitoring the event. No significant concerns were reported in LRE, LRC, LRB, or LRP.

LRL: Reported that 6 lakes are nearing record pools. This includes Cave Run, Monroe, West Fork, Patoka, Taylorsville, and Harsha (aka East Fork). No significant concerns were noted with these lakes, there is still storage capacity available, and LRL is monitoring closely.

L/D 52 and 53 are not locking, but navigation is available over the wickets. Newburgh ceased locking today at 1600 hours. Navigation is still available over the fixed weir if the Coast Guard Waterways Action Plan constraints are met. Constraints include minimum horsepower requirements, a helper boat, etc... JT Meyers will cease locking sometime tonight but navigation will still be available over the fixed weir (same constraints apply).

The only big navigation concern at this point is McAlpine. The north chamber (old 1200 chamber) will cease locking tonight or tomorrow. The south chamber (new 1200 foot chamber) is expected to continue locking for the next several days, but is being monitored closely and may need to cease locking mid to late week (when the upper gage reaches 38'). If/when this happens it will stop navigation.

LRH: Water Management is monitoring the Muskingham basin closely and has not pulled the trigger yet on deploying their Geotech team.

The FEMA 5 Watch Officer reported no issues to discuss during our call.

Best Regards,
Rich Hancock

-----Original Message-----

From: [REDACTED] LRDOR

Sent: Sunday, April 24, 2011 3:44 PM

To: DLL-CELRD-Water Management Update

Subject: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Afternoon Water Management Update - 24 April 2011

Situational Review and Outlook:

Over the past 24 hours, showers and thunderstorms formed throughout the Division AOR. The heaviest rains fell on an axis running along the Ohio River between Cairo and Huntington, WV with 2 to 4 inch rain totals. Very heavy rain was observed in southern Missouri with widespread 3 to 5 inch rain totals along the Mississippi between St. Louis and New Madrid. Rainfall in central Illinois, central Indiana and central Ohio was 0.25 inches to 1 inch. Rainfall in the Lake Erie and Ontario basins was less than an inch with mainly dry conditions for most of the Lake Michigan, Huron and Superior drainage areas.

Today, heavy rain and thunderstorms will continue to impact the Ohio Valley in the same areas along the Ohio River between Cairo, IL and Huntington, WV with the southern part of Missouri also receiving very heavy rain. Rainfall totals today through Monday morning are forecast to be 1 to 3 inches in northwestern Kentucky, southern Ohio, southern Indiana, southern Illinois and southern Missouri with locally higher amounts in thunderstorms. 0.25 to 1 inch rain is forecast today for northern Illinois, northern Indiana, Ohio, West Virginia and Pennsylvania.

Tomorrow, the rainfall axis will shift north and west. Indiana, southern Illinois and southern Missouri will continue to see the heaviest rainfall event with the shift. A break in the rainfall will occur for most of Kentucky, West Virginia, western Pennsylvania and the southeastern two thirds of Ohio. Rainfall totals of 1 to 3 inches are forecast for western

New York, southern Michigan, most of Indiana and Illinois, far western Kentucky near the Barkley and Kentucky Dams, far western Tennessee near Memphis and southeastern Missouri.

Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %
Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %
Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %

Brookville 27.5 %
Nolin River 28.7 %

Nashville District:

Barkley 23.2 % (sloped pool storage)
Dale Hollow 28.7 %

TVA:

Kentucky Dam 22.0 % (sloped pool storage)

Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

██████████ NWO

From: Farhat, Jody S NWD02
Sent: Wednesday, April 27, 2011 9:02 AM
To: ██████████ MVD
Cc: ██████████ NWD02; ██████████ NWD02
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

██████████ - I'm out of the office today and tomorrow due to death in my family. Mike Swenson will be giving you a call.

We are currently looking at options for helping out the situation on the MS, more along the lines of not increasing releases as planned rather than cutting releases. Mike will also be coordinating with Kansas City on any flexibility they have in the operation of Truman/Bagnell reservoirs. All of the other trib reservoirs are too far out and have insignificant releases scheduled to make any difference on the MS.

On the authority issue, we have a HQUSACE Chief Council opinion that indicates that we are not authorized to regulate the Missouri River mainstem reservoir system SOLELY for the benefit of the MS. There is a caveat in the opinion regarding "extraordinary circumstance and considerations of extraordinary authority" at the HQUSACE level. This legal opinion was issued during the drought in 88 or 89 when there was pressure for us to increase releases to ensure navigation through the bottle neck reach. It also came up during the 93 floods. I think the issue is really one of helping out the MS to the detriment of the MO.

In this case with our reservoirs so high - the upper three are at or are forecast to enter the exclusive flood control zones - it would be considered to the detriment of the MO. I sent a note to BG McMahon last night indicating that we will examine the impacts of holding off on any additional release increases until stages begin to drop at Cairo. We have increased releases from 33,500 to 45,000 cfs this week, but had planned on additional releases, up to 55,000 cfs or so early next week once we complete our monthly studies on Tuesday. By maintaining the current releases we can begin to address the high reservoir levels, but by holding off on additional increases we could potentially help out the MS a bit at the same time helping out the lower Missouri River which is experiencing very high flows in the Nebraska City to St. Joseph reach.

That's our current plan. Mike and others in our office are examining the impacts and also coordinating with NWK. I think BG McMahon will be discussing this with MG Walsh later today.

I'll be available by cell phone and bb most of the next two days and back in the office on Friday. Let me, Mike or Kevin know if you have any questions.

Jody

Cell 402-350-1417

-----Original Message-----

From: ██████████ MVD
Sent: Wednesday, April 27, 2011 12:16 AM
To: Farhat, Jody S NWD02
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

Jody,

Burning the midnight oil tonight and needed to send this to you.,

I appreciate your note yesterday and the constraints you have with respect to the reservoirs in your AOR. However, due to the situation we currently have, I need to ask you to review any options one more time and, if possible, "sharpen the pencil."

Current Situation:

- 1) NWS Forecast for Cairo is 60.5 feet (gage height) peak on or about 1 May. This will be a new record stage at that location and our levees have not had this much water against them before. Also, they project the stage will be above 60 from 28 April thru at least 6 May.
- 2) While the rain is expected to stop late Wed thru Friday, NWS does expect additional rainfall this weekend and again next week. While this may not increase the ultimate peak at Cairo, the probability of prolonged durations at these higher stages is increasing.
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Thanks and hope to talk to you Wed.

[REDACTED]
Chief, Watershed Division
Mississippi Valley Division, USACE
1400 Walnut Street, Vicksburg, MS 39181-0080

Office: [REDACTED] Fax: [REDACTED]
Blackberry: [REDACTED]

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Monday, April 25, 2011 9:11 AM
To: [REDACTED] LRDOR
Cc: [REDACTED] NWD02; [REDACTED] MVD; [REDACTED] NWK; [REDACTED] NWK;
[REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; Tipton, Robert A Col NWD;
McMahon, John R BG NWD; [REDACTED] NWD; [REDACTED] NWD
Subject: RE: LRD Commander's Guidance (UNCLASSIFIED)

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I've cc'd Kansas City District H&H branch to see if they have any regulation flexibility, particularly in the operation of HS Trumann reservoir in Missouri.

For those who don't know her, Debbie Lee is my counterpart in charge of Water Management for LRD.

Let me know if you need any additional information.

Good luck.

Regards,
Jody

Jody Farhat, P.E.
Chief, Missouri River Basin Water Management

jody.s.farhat@usace.army.mil
Office: 402-996-3840
Cell: 402-350-1417
Home: [REDACTED]

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 8:15 PM

To: [REDACTED] LRP; [REDACTED] LRP; [REDACTED] LRP; [REDACTED]
LRH; [REDACTED] LRH; [REDACTED] LRL; [REDACTED] LRL; [REDACTED] LRL;
[REDACTED] LRL; [REDACTED] LRN; [REDACTED] LRN; [REDACTED] NWD02; Farhat,
Jody S NWD02
Cc: [REDACTED] MVD
Subject: LRD Commander's Guidance (UNCLASSIFIED)
Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

All,

I need before 1030 ET tomorrow (Monday, Apr 24) the information requested by MG Peabody in item 2 below (parts 1 and 2). Pls provide an Excel spreadsheet that lists the reservoir in Column 1; travel time to Cairo in Column 2 in whole days; today's discharge in cfs; and minimum discharge achievable under current conditions in cfs.

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Jody, Kevin, Chuck,

I am 100% certain the CG will ask what the Upper Mississippi and Missouri can do to aid the flood fight. Pls respond with the requested information for your AOCs if you are able.

Regards,

[REDACTED]
[REDACTED]
Chief, Water Management Division
[REDACTED] office
[REDACTED] cell

<https://sp.lrd.usace.army.mil/Org/rwm/default.aspx>

-----Original Message-----

From: Peabody, John W MG LRDOR

Sent: Sunday, April 24, 2011 6:42 PM

To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED]
[REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR;
DLL-CELRD-District Commanders

Subject: Re: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

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1. From this moment until a DTG TBD, flood preparations will take top priority over all other planned activities or events, to include the ACRCC, the Chief's Change of Responsibility, and any other pre-planned events.
2. The projected most likely flood event on the lower Ohio and lower Mississippi is likely to approach or exceed record levels. Depending on how the weather evolves in the next month, this event has the potential to reach epic proportions. Therefore we must do every single thing we possibly can do -- no matter how small or seemingly insignificant - to reduce the projected maximum crest at Cairo. This includes thinking well outside our normal procedures,

RICH - Thanks, I was on for nearly all of the call.

Tomorrow I need an hour-long session with WM and EM as a minimum at 1100 (we'll have to move the property accty session), to wargame actions we can start taking now to influence the projected river crest at Cairo around 1 May and beyond. Specifically (but not all-inclusively) I'd like to cover the following:

1. Time for a crest under current flow conditions to move from Pittsburgh to Cairo;
2. Describe the maximum flow reductions achievable at all (each one) of our reserviors in the entire Ohio Watershed basin.
3. Key LL's from other recent flood events (93, 97, 08, etc.).

It is essential that we pull out the stops to fight the peak river crest for this event. Thx!

Best,
John P.

----- Original Message -----

From: [REDACTED] LRDOR

To: [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02

Cc: [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; [REDACTED] LRDOR; Landry, Keith A COL LRL; [REDACTED] LRL

Sent: Sun Apr 24 15:34:59 2011

Subject: FW: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: FOUO

FOUO - THIS EMAIL CONTAINS SENSITIVE INFORMATION - PLEASE DO NOT RELEASE

Sir:

Just a few notes from our calls this afternoon. Participated in a phonecon at 1400 hours with MVM, MVD, LRD, and State and USCG reps from the MVD AO. The current forecast from NWS has resulted in MVD increasing their estimated crest at Cairo IL from 58.5 to 60.0 feet. The crest is estimated to occur on 3 May. MVM reported that their estimated crest accounts for the next 48 hours of rainfall but does not account for the full 5-day forecast. It also does not account for any reduction in the crest that we can achieve thru reduced outflow at Kentucky and Barkley.

Debbie Lee reported that our internal LRD model is showing a crest of 61 feet at Cairo IL based on current rainfall on the ground (not including the 5-day forecast). Our model does take into account a reduction of approximately 1.5 feet based on reduced outflow at Kentucky and Barkley beginning on 26 April.

CLOSE-HOLD: MVD has a detailed plan for commencing loading, launching, arrival, and the ultimate decision to exercise the explosives barge. They are following an MVD OPOD which discusses this process. They are also very sensitive about STRATCOMS regarding this plan and have included STRATCOMS, a press release, etc...into their plan. I am providing this info for you, but please do not release since MVD is working the STATCOMS.

25 Apr: 1900 hours, Commence Loading Barge and preparations to launch

26 Apr: 1900 hours, Launch

28 Apr: 0900 hours, Arrive onsite at Birds Point New Madrid and prep site

28 Apr: Midnight, Set-Off explosives

The next decision point for MG Walsh, as the MRC President, is Tuesday morning 26 Apr, when MG Walsh will make the decision on whether to prepare the fuse plug.

Once again - this is close hold and MVD is covering the STRATCOMS.

Concerning our plans for Kentucky and Barkley, we are continuing to draw down the lakes to increase storage capacity. Our plan is to initiate cutting the outflow on 26 Apr and continue with the reduced outflows until 6 May. Our estimate is that we can reduce the crest at Cairo by ~1.5 feet.

The next phonecon we had was at 1430 this afternoon with LRD districts and FEMA region 5. All districts are decisively engaged or actively monitoring the event. No significant concerns were reported in LRE, LRC, LRB, or LRP.

LRL: Reported that 6 lakes are nearing record pools. This includes Cave Run, Monroe, West Fork, Patoka, Taylorsville, and Harsha (aka East Fork). No significant concerns were noted with these lakes, there is still storage capacity available, and LRL is monitoring closely.

L/D 52 and 53 are not locking, but navigation is available over the wickets. Newburgh ceased locking today at 1600 hours. Navigation is still available over the fixed weir if the Coast Guard Waterways Action Plan constraints are met. Constraints include minimum horsepower requirements, a helper boat, etc... JT Meyers will cease locking sometime tonight but navigation will still be available over the fixed weir (same constraints apply).

The only big navigation concern at this point is McAlpine. The north chamber (old 1200 chamber) will cease locking tonight or tomorrow. The south chamber (new 1200 foot chamber) is expected to continue locking for the next several days, but is being monitored closely and may need to cease locking mid to late week (when the upper gage reaches 38'). If/when this happens it will stop navigation.

LRH: Water Management is monitoring the Muskingham basin closely and has not pulled the trigger yet on deploying their Geotech team.

The FEMA 5 Watch Officer reported no issues to discuss during our call.

Best Regards,
Rich Hancock

-----Original Message-----

From: [REDACTED] LRDOR
Sent: Sunday, April 24, 2011 3:44 PM
To: DLL-CELRD-Water Management Update
Subject: Afternoon Water Management Update - 24 April 2011 (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Afternoon Water Management Update - 24 April 2011

Situational Review and Outlook:

Over the past 24 hours, showers and thunderstorms formed throughout the Division AOR. The heaviest rains fell on an axis running along the Ohio River between Cairo and Huntington, WV with 2 to 4 inch rain totals. Very heavy rain was observed in southern Missouri with widespread 3 to 5 inch rain totals along the Mississippi between St. Louis and New Madrid. Rainfall in central Illinois, central Indiana and central Ohio was 0.25 inches to 1 inch. Rainfall in the Lake Erie and Ontario basins was less than an inch with mainly dry conditions for most of the Lake Michigan, Huron and Superior drainage areas.

Today, heavy rain and thunderstorms will continue to impact the Ohio Valley in the same areas along the Ohio River between Cairo, IL and Huntington, WV with the southern part of Missouri also receiving very heavy rain. Rainfall totals today through Monday morning are forecast to be 1 to 3 inches in northwestern Kentucky, southern Ohio, southern Indiana, southern Illinois and southern Missouri with locally higher amounts in thunderstorms. 0.25 to 1 inch rain is forecast today for northern Illinois, northern Indiana, Ohio, West Virginia and Pennsylvania.

Tomorrow, the rainfall axis will shift north and west. Indiana, southern Illinois and southern Missouri will continue to see the heaviest rainfall event with the shift. A break in the rainfall will occur for most of Kentucky, West Virginia, western Pennsylvania and the southeastern two thirds of Ohio. Rainfall totals of 1 to 3 inches are forecast for western New York, southern Michigan, most of Indiana and Illinois, far western Kentucky near the Barkley and Kentucky Dams, far western Tennessee near Memphis and southeastern Missouri.

Tuesday, the rainfall and thunderstorms will shift east. A total of 1 to 3 inches of rainfall will impact northern Michigan, most of Indiana, southwestern Ohio, western Kentucky, western and middle Tennessee, southern Illinois and far southeastern Missouri.

Heavy rainfall will continue Wednesday into Thursday before the weather pattern breaks later on Thursday. Rainfall totals from 1 to 3.5 inches over the 48 hour period are presently forecast for most of Tennessee, Kentucky, West Virginia, western Pennsylvania, Ohio, Indiana, southern Illinois, and far southeastern Missouri.

The 5-day total rainfall issued this morning (valid today through Friday morning) shows widespread 3 to 8 inch rainfall totals across Illinois, Indiana, Ohio, Kentucky, western and middle Tennessee, with localized amounts in excess of 8 inches possible in southern Missouri and new the Cairo/New Madrid area.

Flash Flood Watches and Flood Watches have been issued due to the threat for flooding through the middle of the week across the Ohio Valley. Widespread Flood Warnings and Flood

Advisories are in effect for low lying areas of southern Ohio, Kentucky, southern Indiana, and Illinois.

This morning, minor to moderate flooding was occurring in the Wabash and White River basins in Indiana, the Green River basin in Kentucky, and along the Ohio River at and below Maysville, KY. Major flooding is occurring along the Ohio River at Grand Chain, IL with major to record flooding forecast between Paducah, KY and Cairo, IL. Moderate to Major flood levels are forecast along the White and Wabash Rivers with moderate flooding expected to develop in the lower Scioto Basin in Ohio. Minor flooding is forecast for the Maumee River basin and is beginning now in the Licking River basin in Ohio.

Reservoir Storage:

System-wide reservoir flood control storage utilization today is 15.2%. As of this morning, 19 projects (excluding Barkley and Kentucky) in the Ohio River basin are utilizing over 25% of their flood control storage, and 7 are utilizing greater than 50%:

Pittsburgh District:

Milton	60.4 %
Berlin	39.2 %
Youghiogheny	31.7 %
Union City	40.8 %

Huntington District:

Paint Creek	69.0 %
Senecaville	51.1 %
Deer Creek	44.2 %

Louisville District:

Caesar Creek	27.2 %
East Fork	37.9 %
Cave Run	61.2 %
Monroe	63.8 %
West Fork	60.2 %
Patoka	60.9 %
Cagles Mill	42.6 %
Rough River	47.7 %
Taylorsville	45.8 %
Brookville	27.5 %
Nolin River	28.7 %

Nashville District:

Barkley	23.2 % (sloped pool storage)
Dale Hollow	28.7 %

TVA:

Kentucky Dam	22.0 % (sloped pool storage)
--------------	------------------------------

Ohio River Conditions:

Water levels are above flood stage from Maysville, KY through Cairo, IL. Flows this morning along the mainstem Ohio River are rising at most points and range from 103 kcfs (178 percent of normal) at Pittsburgh, PA to 873 kcfs (188 percent of normal) at Cairo, IL.

Lower Ohio-Mississippi River Flood Control Strategy:

The Cairo stage this morning was 52.36 feet and rising about 1.3' per day. April is a transitional month for flood stages at Cairo; today the intermediate flood stage is 42 feet and major flood stage is 46 feet. Pool levels this morning at Kentucky Lake and Barkley Lake were 358.5 feet. Guide curve elevations also transition during April, rising from 358.2 ft today to 359 ft on May 1.

Discharges at Kentucky and Barkley Lakes were 188 kcfs and 86 kcfs, respectively this morning. Due to increased flows on both the upper Mississippi and lower Ohio Rivers from the recent rainfall, the National Weather Service is forecasting a record crest at Cairo of 60 feet on May 3rd considering rainfall through Monday morning.

Outflows from both projects will be increased today to increase the available flood storage. Discharges may need to be adjusted over the next several days depending on observed rainfall patterns.

*** CONTINGENCY FORECAST***

National Weather Service today ran a contingency forecast that includes the next 5-days of forecast precipitation in the upper Mississippi River basin and in the Ohio River basin. Rainfall amounts for this forecast include 4-10 inches of rain for the period. The National Weather Service estimates the Cairo crest could reach between 61.0 and 63.0 feet on 3 May. LRD Water Management is working closely with MVD and its Districts and the National Weather Service to coordinate our activities in anticipation of using Kentucky and Barkley reservoirs to reduce the crest to the greatest extent possible.

LRD Water Management Division

Classification: UNCLASSIFIED

Caveats: NONE

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

Classification: UNCLASSIFIED

Caveats: FOUO

[REDACTED] NWO

From: McMahon, John R BG NWD
Sent: Wednesday, April 27, 2011 3:02 PM
To: [REDACTED] NWD02; [REDACTED] NWD; Farhat, Jody S NWD02; [REDACTED]
A NWD02; [REDACTED] D NWK; Hofmann, Anthony J COL NWK
Cc: [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWK; [REDACTED]
[REDACTED] NWD; [REDACTED] R NWD; Tipton, Robert A Col NWD
Subject: RE: Harry S Truman Reservoir Operations (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Roger. Thanks, [REDACTED]

-----Original Message-----

From: [REDACTED] NWD02
Sent: Wednesday, April 27, 2011 12:52 PM
To: McMahon, John R BG NWD; [REDACTED] NWD; Farhat, Jody S NWD02; [REDACTED]
NWD02; [REDACTED] NWK
Cc: [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWK; [REDACTED]
[REDACTED] NWD; [REDACTED] NWD; Tipton, Robert A Col NWD
Subject: RE: Harry S Truman Reservoir Operations (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Sir,

FYSA. Per our teleconference earlier today. As stated below, Kansas City District will be reducing releases from Harry S Truman from 21,000 cfs to 0 cfs this afternoon to assist with reducing Mississippi River stages from May 5-8. We will continue to coordinate with NWK on an on-going basis as the event progresses.

V/R
[REDACTED]
[REDACTED]
[REDACTED]

Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

-----Original Message-----

From: [REDACTED] NWK
Sent: Wednesday, April 27, 2011 2:37 PM
To: [REDACTED] NWD02
Cc: DLL-NWK-ED-HC; [REDACTED] NWK; [REDACTED] M NWK; [REDACTED] NWK
Subject: Harry S Truman Reservoir Operations (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO
[REDACTED]

This e-mail is to follow up on our discussions throughout the day. We will be shutting down releases from Harry S Truman starting this afternoon at 1600. SWPA will begin their ramp down procedures at that time. Once SWPA has completed their ramp down procedures Harry S Truman will hold at 0 cfs release through Monday, 2 MAY 2011. It is our intentions to begin releasing stored water, through power releases, beginning Tuesday, 3 MAY 2011, as long as local conditions allow for this. The current forecast indicates that shutting down releases to 0 cfs will raise the Harry S Truman reservoir pool from its current elevation of 709.2 to approximately elevation 712 on Monday, 2 MAY 2011.

[REDACTED]
[REDACTED]
USACE - Kansas City District
[REDACTED]

Classification: UNCLASSIFIED
Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: FOUO

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 27, 2011 2:52 PM
To: McMahon, John R BG NWD; [REDACTED] NWD; Farhat, Jody S NWD02; [REDACTED]
[REDACTED] NWD02; [REDACTED] NWK
Cc: [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWK; [REDACTED]
[REDACTED] NWD; [REDACTED] NWD; Tipton, Robert A Col NWD
Subject: RE: Harry S Truman Reservoir Operations (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Sir,

FYSA. Per our teleconference earlier today. As stated below, Kansas City District will be reducing releases from Harry S Truman from 21,000 cfs to 0 cfs this afternoon to assist with reducing Mississippi River stages from May 5-8. We will continue to coordinate with NWK on an on-going basis as the event progresses.

V/R
[REDACTED]
[REDACTED]
[REDACTED]

Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

-----Original Message-----

From: [REDACTED] NWK
Sent: Wednesday, April 27, 2011 2:37 PM
To: [REDACTED] NWD02
Cc: DLL-NWK-ED-HC; [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWK
Subject: Harry S Truman Reservoir Operations (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

[REDACTED]
This e-mail is to follow up on our discussions throughout the day. We will be shutting down releases from Harry S Truman starting this afternoon at 1600. SWPA will begin their ramp down procedures at that time. Once SWPA has completed their ramp down procedures Harry S Truman will hold at 0 cfs release through Monday, 2 MAY 2011. It is our intentions to begin releasing stored water, through power releases, beginning Tuesday, 3 MAY 2011, as long as local conditions allow for this. The current forecast indicates that shutting down releases to 0 cfs will raise the Harry S Truman reservoir pool from its current elevation of 709.2 to approximately elevation 712 on Monday, 2 MAY 2011.

[REDACTED]
USACE - Kansas City District
[REDACTED]

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Wednesday, April 27, 2011 11:38 AM
To: Farhat, Jody S NWD02
Subject: RE: RCC Guidance Memo??? (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jody,
I responded to [REDACTED] in a separate email to avoid filling your inbox.
[REDACTED]

-----Original Message-----

From: [REDACTED] NWD
Sent: Wednesday, April 27, 2011 11:28 AM
To: [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: RCC Guidance Memo??? (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] Jody,

Am reviewing things to prep for our mtg with Brig Gen McMahon in a bit. ER 1110-2-1400 references that each RCC will prepare a Guidance Memo for use in managing water control activities. (para 8b)

Can you shoot me a copy if you get a minute? Thanks, [REDACTED]

[REDACTED]
[REDACTED], Northwestern Division,
Portland OR [REDACTED] (Attorney Client and/or Attorney Work Product-- DO NOT RELEASE UNDER
FOIA OR OUTSIDE USACE)

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Wednesday, April 27, 2011 11:28 AM
To: [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: RCC Guidance Memo??? (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

MIR/Jody,

Am reviewing things to prep for our mtg with Brig Gen McMahon in a bit. ER 1110-2-1400 references that each RCC will prepare a Guidance Memo for use in managing water control activities. (para 8b)

Can you shoot me a copy if you get a minute? Thanks, Christina

[REDACTED] Northwestern Division,
Portland OR [REDACTED] (Attorney Client and/or Attorney Work Product-- DO NOT RELEASE UNDER
FOIA OR OUTSIDE USACE)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Wednesday, April 27, 2011 10:48 AM
To: Farhat, Jody S NWD02
Subject: RE: State of North Dakota Letter (UNCLASSIFIED)

Importance: High

Classification: UNCLASSIFIED
Caveats: FOUO

Thank you. (Note: I didn't see [REDACTED] name on your email to me?)

v/r,
[REDACTED]

-----Original Message-----
From: Farhat, Jody S NWD02
Sent: Wednesday, April 27, 2011 8:41 AM
To: [REDACTED] NWD
Subject: Re: State of North Dakota Letter (UNCLASSIFIED)

Will do.

[REDACTED] can you work on a draft response.

Thanks,
Jody

----- Original Message -----
From: [REDACTED] NWD
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Sent: Wed Apr 27 08:34:16 2011
Subject: State of North Dakota Letter (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Good Morning Ms. Farhat,

Col Tipton has read the subject letter and recommends that you generate a response.

Best Regards,
[REDACTED]

[REDACTED]
U.S. Army Corps of Engineers
1125 NW Couch Street, Suite 500
Portland, OR 97209
Ph: [REDACTED]

Attachment Classification: UNCLASSIFIED
Attachment Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: FOUO

[REDACTED] NWO

From: [REDACTED] NWD
Sent: Wednesday, April 27, 2011 10:34 AM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Subject: State of North Dakota Letter (UNCLASSIFIED)
Attachments: State of North Dakota Ltr.-April 20, 2011.pdf

Classification: UNCLASSIFIED
Caveats: FOUO

Good Morning Ms. Farhat,

Col Tipton has read the subject letter and recommends that you generate a response.

Best Regards,
[REDACTED]

[REDACTED]
[REDACTED]
U.S. Army Corps of Engineers
1125 NW Couch Street, Suite 500
Portland, OR 97209
Ph: [REDACTED]

Attachment Classification: UNCLASSIFIED
Attachment Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO



State of North Dakota

Office of the State Engineer

900 EAST BOULEVARD AVE. • BISMARCK, ND 58505-0850
701-328-2750 • FAX 701-328-3696 • <http://swc.nd.gov>

April 20, 2011

Brigadier General John R. McMahon
Commander and Division Engineer
U.S. Army Corps of Engineers
1125 NW Couch St., Suite 500
Portland, OR 97209

RE: High Missouri River System Reservoir Levels

Dear Brigadier General McMahon:


I am concerned with the high levels of Lake Sakakawea and Lake Oahe, and the above normal snowpack that will be generating a great deal of additional runoff. We are concerned your forecast does not adequately address the current conditions in the basin and the potential for above normal precipitation this summer.

As of April 20, Lake Oahe had the second highest daily April elevation of 1616.8 feet, only to be exceeded in April 1997; and Lake Sakakawea had the third highest daily April elevation of 1845.1 feet, surpassed by April of 1972, and 1997. The mountain snowpack is well above average at 114% and the plains spring runoff is currently ongoing. The downstream discharges seem low compared to the mountain snowpack, and the current availability of flood storage.

I ask the Corps to limit the usage of the exclusive flood pools to only when absolutely necessary. We urge the Corps to be cognizant of impacts that high releases out of the dams have on channel erosion, and encourage the Corps to have enough foresight so the evacuation of water can be made in an orderly fashion and limit unnecessary peaking. I also ask the Corps to review the runoff forecast and ensure its accuracy.

I thank you for taking my concerns under consideration.

Sincerely,


Todd Sando, P.E.
State Engineer

TS:BE:KC:mmmb/1392



[REDACTED] NWO

From: [REDACTED] NWD
Sent: Wednesday, April 27, 2011 10:00 AM
To: Farhat, Jody S NWD02
Subject: RE: Update since this morning's Missouri River call (UNCLASSIFIED)
Attachments: document2011-04-13-115348.pdf

Classification: UNCLASSIFIED
Caveats: NONE

Jody, thanks for letting me know what you prepare. I attached a copy of what NWW prepares, sounds like we all do things a bit differently

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 8:34 PM
To: [REDACTED] NWD
Subject: FW: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] - this is an example of the types of updates I provide to the CG, Witt and others. If you'd like, I can start adding you to my distribution list for situational awareness.

Jody

-----Original Message-----

From: Farhat, Jody S NWD02
Sent: Tuesday, April 26, 2011 12:27 AM
To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD
Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02
Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo.

Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] and Kim Thomas (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

Kim indicated that all of NWO's priority areas on the riverside of the levees have been completed. Levee 550 is going to be the main levee of concern as they are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. [REDACTED] will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Flood Potential Report, April 2011

1. October to February Weather Summary.

a. Regional Weather Conditions. During the period 01 October to 31 March 2011, cumulative precipitation amounts within the Walla Walla District have varied around 120 percent of average for the Lower Snake and from 115-140 percent of average for the Middle Snake and Upper Snake. For the Snake River above Ice Harbor, October through March precipitation was 124 percent of normal. March precipitation was 145-190 percent of average for the Lower Snake and was 145-185 percent of average for the Middle Snake and Upper Snake. For the Snake River above Ice Harbor March precipitation was 170 percent of normal.

b. Seasonal Precipitation. The following tabulation summarizes seasonal precipitation accumulations for selected basins with the Columbia River drainage system. Basin precipitation data were obtained from the National Weather Service (NWS) River Forecast Center (RFC), Portland, Oregon.

<u>Basin</u>	<u>Percent of Average Precipitation</u>	
	<u>1 - 28 Feb</u>	<u>1 Oct - 28 Feb</u>
Columbia River above Grand Coulee	122	112
Columbia River above The Dalles	100	111
Snake River above Ice Harbor	75	115
Upper Snake River	80	124
Snake River Plain	63	123
Owyhee and Malheur Rivers	77	133
Salmon, Boise, and Payette Rivers	52	103
Burnt and Grande Ronde Rivers	81	107
Clearwater River	111	118
Southeastern Washington Rivers	86	111

c. Basin Streamflows. October through March unregulated streamflows for major basins in the Walla Walla District were 86 percent of average for the Snake River near Heise, 88 percent

CENWW-EC-H

SUBJECT: Flood Potential Report, April 2011

of average for the Boise River at Lucky Peak Dam, 110 percent of average for the North Fork Clearwater River at Dworshak Dam, and 92 percent for Lower Granite Reservoir inflows.

2. Basin Snowpacks. Snowpack measurements reported by the Natural Resource Conservation Service (NRCS) on 01 April varied between 108-129 percent of average in the Lower Snake, 104-178 percent of average in the Middle Snake, and 109-136 percent of average in the Upper Snake. Individual basin snowpack percent of average values are shown on Table 1 (enclosure 1).

3. Runoff Volume Forecasts. Runoff volume forecasts are tabulated on Table 1 (enclosure 1). The 01 April forecasts of spring runoff varied between 106-141 percent of average over the District. In general, the forecasts for most sub-basins within the Snake River Basin are average to above average. The April through July runoff volume forecast for the Snake River at Lower Granite Dam is 25.1 million acre-feet (AF) or 116 percent of average.

4. Reservoir Status. Storage levels on 01 April for major reservoirs within the Walla Walla District are near normal and vary between 8-97 percent full. Table 2 (enclosure 2), shows storage for these as reported by their operating agencies. Due to the significant increase in water supply forecast volumes in the Snake River Basin, several major reservoirs are being drafted to generate additional flood control space. The Boise System, Dworshak and the Upper Snake System are drafting to make additional flood control space by April 30th or April 15th. As of April 1st, all remaining reservoirs, with flood control responsibility, have adequate space available based on the current volume forecasts and ten day weather forecast. The general plan of operation for major storage reservoirs is to draft for flood control through the middle to end of April and then transition to refill in late April or May.

5. Project Operations.

a. Jackson and Palisades System. The 01 April to 31 July operational runoff volume forecast for the Upper Snake River at Heise is 4.260 million AF (120 percent of average). Based on this forecast, 200,000 AF of space is required in Jackson Lake through 01 May and a total of 1,450,000 AF of space is required in the system on April 30th. On 01 April, the combined usable flood control space in Jackson Lake and Palisades Reservoir was 753,840 AF. Jackson Lake currently has 187,460 AF of space available. The Bureau of Reclamation has been increasing discharge from Jackson Lake by 20% per day until discharge reaches 5 kcfs to regain the required 200,000 AF of space by the end of April. The District has approved the Bureau of Reclamation's plan of operation is to maintain the current discharge of 14,000 cfs throughout April from Palisades Dam with a possible adjustment based on the mid-month forecast. These releases are required to shift water stored in Palisades downstream to American Falls for irrigation and increase the flood control space in Palisades. The Jackson and Palisades reservoir system is about 63 percent full at the present time.

b. Boise River System. The 01 April to 31 July operational runoff volume forecast for the Boise River at Lucky Peak Dam is 1,500 AF (106 percent of average). The combined available system space at Anderson Ranch, Arrowrock, and Lucky Peak projects was 230,430 AF on 01 April. The 30 April flood control requirement for system space is 500,000 AF based on the current water supply forecast. The joint Corps of Engineers and Bureau of Reclamation's plan of operation through March is to adjust Lucky Peak's releases to maintain bankfull discharge at Glenwood Bridge (6,500 cfs) to increase the available flood control space in the system. As of 01 April, the Boise River reservoir system was about 76 percent full.

c. Dworshak Reservoir. The 01 April to 31 July operational runoff volume forecast for the North Fork Clearwater River at Dworshak Dam based on Principal Components Regression (PCR) is 3.39 million AF (126 percent of average) and 2.93 million AF (109 percent of average) based on Linear Regression. Based on the PCR forecast, 2,016,000 AF of space is required on 15 April for system flood control this corresponds to reservoir elevation 1445 feet which is minimum active pool. Water Management staff have examined the cause for the significant difference between the two forecasts and have determine that the PCR forecast contains two factors that currently appear to be causing the forecast to be excessively high. Therefore a deviation request has been submitted to, and approved by NWD Water Management to operate to a forecast of 2.97 million AF through April 15th. The forecast in the deviation request is the average of 5 different forecasts generated by the Corps of Engineers, NWS-River Forecast Center, and the National Resource Conservation Service. The flood control refill target elevation on 30 April is currently 1471 feet. On 01 April the elevation at Dworshak was 1463.1 ft with 1,848,00 AF of space available. Dworshak Reservoir inflows during March averaged 6,850 cfs and mean daily project releases averaged 13,760 cfs. The current operation is to maintain 20,000 cfs discharge until the reservoir is drafted to the April 15th flood control target listed in the deviation (elevation 1451.4 feet), then decrease discharge to an average of about 6,000 cfs to begin refill.

d. Mill Creek Reservoir. Currently the snowpack in the Blue Mountains is 102% of normal with no frozen ground, however the snotel site closest to the basin is currently showing 88% of normal snowpack. There is little snow remaining in the Blue Mountains, however if unseasonably cold temperatures are followed by heavy precipitation there is still a potential for high runoff. The Mill Creek reservoir is currently filling to its summer conservation pool, but remains ready for diversions into the reservoir if needed. The diversion objective for Mill Creek is still to limit flows passing through Walla Walla to less than 3500 cfs.

6. Flood Potential.

a. Winter. The period for winter flood potential is past. Flood potential will now be due to spring precipitation and snowmelt events.

CENWW-EC-H

SUBJECT: Flood Potential Report, April 2011

b. Spring. The 01 April conditions generally provide the best indicator of the spring flood potential prior to the runoff beginning. This is because all of the winter snowpack normally accumulates by 01 April. Due to the substantially above average snowpack and the potential for additional precipitation there is a significant spring flood threat. Based on current seasonal runoff forecasts and snowpack conditions the spring flood potential is considered to be above normal. There is a significant chance that regulated flows for major basins may approach flood stage, especially if significant precipitation or heating events are experienced. The flood potential within the District will be reevaluated daily throughout the month of April and May and several projects are currently being drafted to provide additional flood control space.

7. The Hydrology Section will continue to monitor weather and river systems and will issue customary alerts should critical patterns develop.



2 Encls

1. Table 1

2. Table 2

for

Brian Miller, P.E., PMP

Chief, Engineering and Construction Division

Walla Walla District Corps of Engineers

CENWW-EC-H

SUBJECT: Flood Potential Report, April 2011

DISTRIBUTION (w/encls):

Commander

Chief, Project Management

Chief, Plan Div

Chief, Constr Br

Chief, Engr & Constr Div

Chief, Design Br

Chief, Oper Div

Chief, Regulatory Br

Chief, Nat Res Mgt Br

Chief, Readiness Br

PAO

Operating Project Manager, Dworshak ([REDACTED])

Operating Project Manager, Lower Granite ([REDACTED])

Operating Project Manager, Little Goose ([REDACTED])

Operating Project Manager, Lower Monumental ([REDACTED])

Operating Project Manager, Ice Harbor ([REDACTED])

Operating Project Manager, McNary ([REDACTED])

Operating Project Manager, Lucky Peak ([REDACTED])

Operating Project Manager, Mill Creek ([REDACTED])

CENWD-NP-ET-W

TABLE 1
SNOWPACK CONDITIONS AND RUNOFF VOLUME FORECASTS
1 April 2011

River	Location	Snow Water	April-July	
		Content	Runoff	Forecast
		Percent of	Percent of	
		Average	1,000 AF	1971-2000 Avg
<u>UPPER SNAKE</u>				
Snake	Jackson Lake Inflow	114	960	109
Snake	Heise	121	4,260 <u>1/</u>	120
Teton	St. Anthony	114	445	110
Henry's Fork	Rexburg	116	1,670	107
Willow Creek	Ririe Reservoir Inflow	136	105 <u>2/</u>	129
Portneuf	Topaz	123	112 <u>5/</u>	118
Big Lost	Mackay Reservoir Inflow	109	151	106
<u>MIDDLE SNAKE</u>				
Big Wood	Hailey	105	275	107
Big Wood	Magic Reservoir Inflow	104	320	110
Little Wood	Carey	123	94 <u>1/</u>	108
Boise	Boise	106	1,500 <u>1/</u>	106
Payette	Horseshoe Bend	108	1,810	112
Owyhee	Owyhee Reservoir Inflow	161	840 <u>3/</u>	137
Malheur	Drewsey	178	153 <u>3/</u>	139
N.F. Malheur	Beulah Reservoir Inflow	---	114 <u>3/</u>	141
Snake	Weiser	---	6,800	118
Weiser	Weiser	117	440	113
Powder	Sumpter	127	89 <u>3/</u>	127
<u>LOWER SNAKE</u>				
Salmon	Whitebird	108	6,110	104
Grande Ronde	LaGrande	129	225 <u>3/</u>	122
N.F. Clearwater	Dworshak Reservoir Inflow	114	2,934 <u>4/</u>	109
N.F. Clearwater	Dworshak Reservoir Inflow	114	3,387 <u>6/</u>	126
Clearwater	Spalding	112	8,640	109
Snake	Lower Granite Inflow	---	25,100	116
<u>LOWER COLUMBIA</u>				
S.F. Walla Walla	Milton	102	57	108
Columbia	The Dalles	---	107,000 <u>5/</u>	108

Forecasts prepared by the NWS River Forecast Center, except as noted:

- 1/ Operating April-July runoff forecast by USBR and CENWW
- 2/ Operating April-June runoff forecast by USBR and CENWW
- 3/ March-July runoff forecast
- 4/ Operating April-July runoff forecast by USACE
- 5/ April-September runoff forecast
- 6/ Operating April-July runoff forecast by USACE-Principal Components

Enclosure 1

TABLE 2
MAJOR RESERVOIR STATUS
1 April 2011

<u>Stream Basin</u>	<u>Reservoir</u>	<u>Total Active Capacity (AF)</u>	<u>Observed Active Storage (AF)</u>	<u>Space Available (AF)</u>	<u>Active Capacity Percent Full</u>
Snake River	Jackson Lake	847,000	659,540	187,460	78%
Snake River	Palisades	1,200,000	633,620	566,380	53%
Snake River	American Falls	1,672,590	1,329,530	343,060	79%
Henrys Fork	Island Park	135,200	100,310	34,900	74%
Willow Creek	Ririe	80,500	48,460	32,040	60%
Big Lost River	Mackay	44,400	37,740	6,660	85%
Little Wood River	Little Wood	30,000	22,880	7,120	76%
Big Wood River	Magic	191,500	107,020	84,480	56%
Owyhee River	Owyhee	715,000	629,030	85,970	88%
Boise River	Anderson	413,100	305,540	107,560	74%
Boise River	Arrowrock	272,200	225,630	46,570	83%
Boise River	Lucky Peak	264,400	188,100	76,300	71%
Payette River	Deadwood	154,000	104,500	49,500	68%
Payette River	Cascade	645,500	448,720	197,780	69%
Malheur River	Bully Creek	23,700	20,620	3,080	87%
Malheur River	Warm Springs	169,600	109,250	60,350	64%
Malheur River	Beulah	59,900	51,610	8,290	86%
Powder River	Mason	73,500	53,090	20,410	72%
N.F. Clearwater River	Dworshak	2,015,800	167,200	1,848,600	8%
Umatilla River	McKay	65,500	63,533	1,967	97%

Tabulation derived from reports of the respective operating agencies.

Enclosure 2

[REDACTED] NWO

From: [REDACTED] NWO
Sent: Wednesday, April 27, 2011 9:16 AM
To: DLI-CENWO-OD-EP
Cc: [REDACTED] NWO; [REDACTED] NWD02; Farhat, Jody S NWD02 [REDACTED]
[REDACTED] NWD02
Subject: FW: Ice off Lake (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

All:

Per [REDACTED] note, we can declare ice off the lake as of today.

[REDACTED]
-----Original Message-----

From: [REDACTED] NWO
Sent: Wednesday, April 27, 2011 7:24 AM
To: [REDACTED] NWO
Cc: [REDACTED] NWO
Subject: Ice off Lake (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

I checked the lake last night, found only very small amount of slush ice in two bays. Nothing that would hamper navigation if a boat drove in it. I am sure it will all be gone today.

If nobody officially called it yet, I would call "ice off" today.

[REDACTED]
Fort Peck Project, Fort Peck, Montana
[REDACTED] Extension [REDACTED]

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: McMahon, John R BG NWD
Sent: Wednesday, April 27, 2011 9:02 AM
To: [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD02; [REDACTED] NWD02; [REDACTED] NWD; Tipton, Robert A Col
Cc: Farhat, Jody S NWD02
Subject: Fw: Missouri River Basin Update (UNCLASSIFIED)

Team:

I plan to participate in this coordination forum--will need your involvement to help discern when we're going beyond incidental benefits--and when those higher, extraordinary authorities are at play, even better from my perspective. More to the point, [REDACTED] and [REDACTED] am looking for options here--Jody sent me a good one late last night that I presume you are aware of--let's set up a call for this morning to air this and any others out. Thanks.

Pam: I will not be going down the Willamette today--COL Tipton will go for me. Please let COL Miles know, and set up this call with RCC. Thanks.

Finally, know that Jody is out for a few days with a death in her family so [REDACTED] is in charge there.

Vr/John McMahon

----- Original Message -----

From: Peabody, John W MG LRDOR
To: Walsh, Michael J MG MVD; McMahon, John R BG NWD; [REDACTED] HQ02
Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] LRDOR; Drolet, John D. COL LRDOR; [REDACTED] LRDOR; [REDACTED] HQ02; [REDACTED] HQ02; Lee, Alvin B COL HQ02
Sent: Wed Apr 27 06:44:13 2011
Subject: Re: Missouri River Basin Update (UNCLASSIFIED)

[REDACTED] Mike and John -

We are in for a very challenging period that is likely to last for at least 2 weeks by my estimate, and we are likely to win or lose this fight based on small margins. It is my belief that each of our decisions could make the decisive difference.

I recommend we ramp up our inter-Division WM coordination. Timing and marginal quantities of releases from MO Rvr and OR basin pools could be decisive. LRD WM staff provided the below info on the Mississippi River Water Control Management Board, which I recommend we invoke. Since Bill is out of town, Steve would probably be the nominal head til he returns.

Given we have the biggest flow management responsibilities, LRD is willing to take the lead to work this. I am asking Rich Hancock to contact his counterparts in your Div's to coordinate this effort, and Pls advise if you concur.

V/r,
John

STAFF QUOTE FOLLOWS:

"According to ER 15-2-13, the Mississippi River Water Control Management Board serves as a forum for resolution of water control problems among Corps of Engineers Divisions within the Mississippi River Basin when agreement is otherwise unobtainable. The Director of Civil Works serves as the chair of the board, and the board is comprised of the Division Commanders from MVD, LRD, NWD and SWD. The Board makes recommendations to the Chief of Engineers for his

decision. You, BG McMahon, and MG Walsh will have to discuss and take to LTG Van for decision."

----- Original Message -----

From: Walsh, Michael J MG MVD
To: McMahon, John R BG NWD; Peabody, John W MG LRDOR
Sent: Tue Apr 26 19:24:32 2011
Subject: Re: Missouri River Basin Update (UNCLASSIFIED)

John,

Great report. In regards to the flood way, it is reported that we will be at 60 on the Cairo gate for a long time perhaps past 12 May but my notes are in the office. I asked my HH guys to see if you can hold off until after we be below 60? HH guys working. This will be the longest the system will be under such a heavy load in ??? Perhaps ever. Any help in the out days will get us past the long stress on the project.

I will call tomorrow both you and brother Peabody after I fly the system and land in Mo and before the press event.

Mike

----- Original Message -----

From: McMahon, John R BG NWD
To: Van Antwerp, Robert L LTG HQ02; Walsh, Michael J MG MVD; Peabody, John W MG LRDOR
Cc: Grisoli, William T MG HQ02; [REDACTED] HQ02; [REDACTED] HQ02;
[REDACTED] NWD; [REDACTED]; Farhat, Jody S NWD02; Ruch, Robert J COL NWO;
Hofmann, Anthony J COL NWK; Tipton, Robert A Col NWD; [REDACTED] HQ02; [REDACTED]
NWD; [REDACTED] NWD; [REDACTED] NWD
Sent: Tue Apr 26 20:28:29 2011
Subject: Missouri River Basin Update (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Chief:

We have been closely monitoring the evolving situation across the ENTIRE Mississippi River Watershed (the 3d largest in the world as [REDACTED] likes to refer to it) and wanted to update you and the other Div Engineers on the specifics of the situation in the Missouri Basin as options are considered and decisions are made.

1. The Missouri Basin typically endures 2 pulses of snowmelt and runoff each year--one in the plains in the March-April timeframe and one later in the early summer in May-July timeframe. We are generally finished with the first pulse and have been participating in various smaller floodfights at the district level which continue today--generally, these are going "well" as far as local flooding and suffering can go.
2. The snowpack melt is expected to approach record levels as it is still accumulating in the mountains--was 115% of Normal on 1 April, is 130% as of 25 April and projected to approach the record of 137% on 1 May (which was the 1997 record). This translates into a another BIG year of cautiously but aggressively evacuating the Missouri Mainstem System Storage as we did last year (2010) which as you may recall was exacerbated by untimely rains in the plans below Gavins Point Dam, the last point on the Mainstem from which we can regulate flows.
3. Since March 1, the reservoir system has captured over 8 MAF of flood water. System storage is currently only 1 MAF shy of where it peaked in 2010, and inflows to the system remain much above normal. One of the mainstem reservoirs, Oahe, is only a few tenths of a

foot below the exclusive flood control zone (EFCZ). In short, 2011 is already a huge water year in the Missouri River basin and we're just getting started.

4. Our current plans to evacuate the system (subject to change as we get the next forecasts o/a 1 May and finalize the next iteration of our Runoff Forecasts and Reservoir Forecasts next week), are to increase releases from Gavins Point from 33.5 Kcfs on Monday (25 April) to 36.5 Kcfs on Tues to 42 Kcfs on Wed to 45 Kcfs on Thursday, anticipating that we will likely need to increase releases even further once the next forecasts come out next week--these releases may increase up to 55 Kcfs early in May knowing what we know today. These increases are necessitated by the pool in each of the BIG 3 reservoirs at the upper end of the system as follows: Oahe--from inches away from being in the EFCZ on 25 April to +2 ft into the EFCZ; Garrison--from -4 feet to +2 feet into the EFCZ; and Fort Peck--from -4 feet to +2 feet into the EFCZ--our margin of safety and opportunity to regulate flow in quickly shrinking and we are acting now to address what portends to be a very high (if not record) year. We are also closely monitoring the ongoing work to repair levees that were damaged during last year's high water events in both NWO and NWK footprints.

5. As with our experience last summer, we are very sensitive to the downstream affects of these increases in release rates from Gavins Point and are monitoring the lower reaches of the system very carefully as we do. Obviously, given what is happening in LRD and MVD, we are equally concerned about the impacts to the Mississippi River. To that end, there is limited legal authority (if any) within the Missouri Basin to "operate [these] reservoirs to benefit interests on the Mississippi River" without invoking "extraordinary circumstance and considerations of extraordinary authority" at the HQUSACE level. Nonetheless, we are coordinating through our respective division River Management offices any "incidental" benefits that may possibly accrue from such coordination. These citations are from a Les Edelman legal opinion, written as Chief Counsel on 17 August 1990. That said, I seriously doubt we have much flexibility here given our predicament in the upper basin already.

6. By the way, there is a 10 day travel time component between Gavins Point and St Louis, with another 2+ days to Cairo, Ill. So even if we wanted to do something, the timing of the flows puts us past 8 May, several days past the current projected peak flow there at Cairo. We continue to stay engaged as this situation unfolds.

VR, John

-----Original Message-----

From: Farhat, Jody S NWD02

Sent: Monday, April 25, 2011 10:27 PM

To: McMahon, John R BG NWD; [REDACTED] NWD; Tipton, Robert A Col NWD; [REDACTED]

NWD; [REDACTED] NWD; [REDACTED] NWD; [REDACTED] NWD

NWD

Cc: [REDACTED] NWD02; [REDACTED] NWD02; Farhat, Jody S NWD02

Subject: Update since this morning's Missouri River call (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

Sir - a couple updates since this morning's call.

I listened in on the joint LRD/MVD water management call this afternoon. Participants included LRD, MVD, Nashville, Memphis, Vicksburg, New Orleans, St. Louis, and Louisville Districts, TVA, three NWS River Forecast Centers (Ohio River, Lower Mississippi, and North Central) and the Hydrologic Prediction Center.

The Mississippi River at Cairo is still forecast to crest at 61 feet on 3 May. This forecast includes 48 hours of precipitation and the special reservoir operation detailed below. Rain is forecast for the next 24-36 hours after which drier conditions should prevail.

A special operation is planned at the Kentucky/Barkley dams. Releases are being stepped up on Monday and Tuesday this week to a combined release of 355,000 cfs to evacuate the reservoirs to provide storage space for forecasted rainfall runoff. Then beginning Wednesday, releases will be stepped down dramatically to minimum release rates (combined release of 18,000 cfs) by Sunday in an attempt to reduce the peak stage at Cairo. Implementation of the plan was contingent on the Districts being able to get flood preparations completed prior to the river reaching critical levels. The plan results in a more rapid rise on the leading end of the hydrograph due to the flood water evacuation, but reduces the peak stage at Cairo by approximately 1.5 feet. The districts are also making small scale adjustments at three other Corps projects in the Nashville District.

As for the levee status, I received the following updates from [REDACTED] and Kim Thomas (NWO):

[REDACTED] indicated that Union Township and Holt County levees have Level of Protection (LOP) in-place. Baltimore Bend is under construction and Belzer-Lozier will follow Baltimore. There are also six levee systems in NWK with various degrees of sidewash and other damage that have not received funding for repairs.

Kim indicated that all of NWO's priority areas on the riverside of the levees have been completed. Levee 550 is going to be the main levee of concern as they are still constructing the seepage berms and relief wells on the inside of the levee to deal with all of the boils there last year. There are a few additional levees that haven't been funded.

Both EM chiefs asked that we keep them updated with regard to releases and they will be ready to respond as needed.

The releases we're proposing won't put water on any levees once conditions on the lower Missouri River dry out a bit. Until that time, the river will run near flood stage from Nebraska City to Rulo.

I'm at a Programmatic Agreement meeting with the Tribes on Tuesday. [REDACTED] will be sitting in on the LRD/MWD Water Management conference call.

Call or email if you have any questions or concerns.

VR,
Jody

Cell: 402-350-1417

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: FOUO

NWO

From: William Lay [wlay@socket.net]
Sent: Thursday, April 28, 2011 5:38 PM
To: Farhat, Jody S NWD02
Subject: Reservoirs

With these high discharges you are getting the system down slightly. That is very good.

I am glad you are working on the lower reservoirs. They need it.

You are getting a little more in Peck. Could we get the percentage of flood control storage in Peck up to the percentage of the system storage which is filled? Probably not, but it is a thought.

I will see you Monday.

Why did Larry retire?

Bill Lay

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Thursday, April 28, 2011 1:26 PM
To: [REDACTED] NWO
Cc: Farhat, Jody S NWD02; [REDACTED] NWD02
Subject: Release Capacities at Mainstems (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED]

Got your voice mail. I assume you're speaking about Fort Peck, Garrison, and Oahe? We're already using the spillways at Fort Randall and Gavins.

Oahe: Rather than using the spillway, we use the outlet tunnels #1-#6. Tunnel capacity at max pool (1620') is 111,000 cfs. The spillway has never been used and provision for a conventional spillway chute and stilling basin has been deferred.

Garrison: Like Oahe, we use the outlet tunnels #6-#8. Capacity of these tunnels is about 100,000 cfs at max pool, which exceeds downstream channel capacity. Spillway discharge capacity at max pool (1854') is 660,000 cfs. An unlined pilot channel will erode and guide flows to the Missouri River in the event that spillway releases are required. To my knowledge that spillway has never been used.

Fort Peck: Unlike Oahe and Garrison, we cannot use the flood tunnels at Fort Peck and must use the spillway for total flows > power flows (max power flows are about 11,000 cfs). Discharge capacity at max pool (2250') is 230,000 cfs.

- [REDACTED]

[REDACTED]

Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWO
Sent: Thursday, April 28, 2011 12:55 PM
To: [REDACTED] NWO [REDACTED] NWO
Cc: Farhat, Jody S NWD02
Subject: RE: Spillway Status (UNCLASSIFIED)

The quick answer would be to talk to Jody Farhat / water management. I could tell you the spill / outlet capacities but I think you may be wanting to know bank capacities etc and I think they would be better able to answer that.

[REDACTED]
-----Original Message-----

From: [REDACTED] M NWO
Sent: Thursday, April 28, 2011 12:26 PM
To: [REDACTED] NWO; [REDACTED] NWO
Subject: FW: Spillway Status (UNCLASSIFIED)

[REDACTED]
Can you give me a run down on amounts and capability to spill at all locations. As well as any limitations. [REDACTED]

-----Original Message-----

From: Ruch, Robert J COL NWO
Sent: Thursday, April 28, 2011 12:08 PM
To: [REDACTED] NWO
Subject: Spillway Status (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED]
When you have time can I get an assessment on our capacity to spill on the mainstem projects? Snowpack has me a bit concerned as I am sure others are.

V/R,

COL Bob Ruch
Commander
Omaha District, USACE
(402) 995-2001
<https://www.nwo.usace.army.mil/>

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED]
Sent: Thursday, April 28, 2011 11:41 AM
To: Farhat, Jody S NWD02
Subject: River mile request for UGLAA

Jody, Would you provide the River Miles for Fort Randall, Big Bend and Fort Peck? Thank you, JBG, PE

Joseph B. Gibbs, PE, [REDACTED], Columbia, Missouri 65203 Ph [REDACTED] -----
FAX 573-815-0546-----E-Mail: [REDACTED]

[REDACTED] NWO

From: Swan, Patrick A NWD
Sent: Thursday, April 28, 2011 10:54 AM
To: Farhat, Jody S NWD02
Subject: FW: Flood fight talking points (UNCLASSIFIED)
Attachments: 2011 flooding talking points - as of 1600 hrs, 27 Apr 11.docx

Jody

Here's some top cover from HQ USACE PAO

Patrick

Patrick A. Swan
Senior Public Affairs Officer
Northwestern Division, US Army Corps of Engineers

w 503 808 3710

patrick.a.swan@usace.army.mil

patrick.swan@us.army.mil

The first priority is making sure
that the first priority remains
the first priority.

-----Original Message-----

From: Walters, Candice S HQ02
Sent: Thursday, April 28, 2011 5:36 AM
To: CDL-All-Public-Affairs-District-Chiefs; CDL-All-Public-Affairs-Division-Chiefs
Cc: Walters, Candice S HQ02
Subject: Flood fight talking points (UNCLASSIFIED)

Classification: UNCLASSIFIED

Caveats: NONE

All:

We have begun putting together talking points here at HQ about this year's flood fighting efforts.

We expect to send these out daily.

v/r,

Candy

Candice S. Walters
Public Affairs Specialist
Headquarters, U.S. Army Corps of Engineers
202-528-4285
202-761-0010 (main office number)
candice.s.walters@usace.army.mil

www.usace.army.mil

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Classification: UNCLASSIFIED

Caveats: NONE

Talking Points – April 2011 Flood Fighting Effort

(as of 1600 hrs, 27 April 2011)

GENERAL PROGRAM INFORMATION

- Public safety is the number one goal of the USACE Flood Risk Management Program.
- USACE executes an annual \$1.6 billion Flood Risk Management program of coastal and riverine projects centered around a watershed, life cycle approach of preparation, response, recovery, and mitigation.
- We recognize that managing and communicating flood risk is a shared responsibility among federal, state, local, and private partners so individuals can make well informed public decisions about their safety.
- Public Law 84-99, Flood Control and Coastal Emergency Act, gives the Corps specific authorities to conduct preparedness, response, recovery, and rehabilitation activities.
- USACE provides disaster support to the nation: by our inherent Civil Works authorities for reservoir and dam / lock operations, Public Law 84-99 (Flood Control Act of 1941), by support to the Department of Homeland Security / Federal Emergency Management Agency, under the National Response Framework, and pursuant to the Stafford Act (Public Law 93-288), and support to the Department of Defense: domestic support to NORTHCOM and ARNORTH, overseas operations in Iraq and Afghanistan, and provision of field force engineering.
- In coordination with States, the Corps deploys flood fighting materials and supplies (sandbags, pumps, and expedient flood fight products), pre-positions flood flight supplies and equipment, and deploys flood engineers to provide technical assistance.

CURRENT FLOOD FIGHT

- Along with FEMA and our State and local partners, we are actively engaged in fighting the effects of spring flooding at Devils Lake, ND and along the Red, James, Mississippi, Missouri, Cumberland, Big Sioux, and Ohio Rivers and have spent, within our authorities, more than \$30 million of emergency funds for flood fighting materials and equipment, field investigations, monitoring levees, emergency contracting, and technical assistance.
- This is the third consecutive year where widespread and record flooding has occurred within the North Central United States.
- Currently, Corps water management officials are coordinating closely with state, local, private, and interagency partners along the Mississippi and Ohio Rivers to manage reservoirs and execute operations to reduce the risk of flooding to the greatest extent possible.
- Of most immediate concern is the confluence of the Ohio and Mississippi Rivers at Cairo, Illinois, where the National Weather Service is predicting a record crest (61 feet) on 3 MAY. As a point of comparison, the flood of record in 1937 crested at 59.5 feet.
- The Mississippi River Commission, the Corps' Mississippi Valley Division, and the Corps' Memphis District are coordinating closely with other governmental agencies, communities and stakeholders to monitor conditions and execute prudent actions for potentially operating the Birds Point-New Madrid Floodway.
- As always, residents who live and work near flood-impacted levees should remain vigilant and must be prepared to follow directions from their local emergency management officials.

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Friday, April 29, 2011 7:45 PM
To: Farhat, Jody S NWD02
Subject: Re: Release Capacities at Mainstems (UNCLASSIFIED)

Jody,
Sorry - I should have read [REDACTED] response more closely. Do you want me to get her the clarification tomorrow (Sat) or will Monday work?
[REDACTED]

Message sent via my BlackBerry Wireless Device

----- Original Message -----

From: Farhat, Jody S NWD02
To: [REDACTED] NWD02
Cc: [REDACTED] NWD02
Sent: Fri Apr 29 13:41:18 2011
Subject: RE: Release Capacities at Mainstems (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

The answer provided for Fort Peck is not correct. We can use the outlet tunnels at Fort Peck, but not for very high flows or very high discharges. Also peak powerplant flows at Ftpk are not correct.

[REDACTED] - please confirm/correct these figures and send [REDACTED] a clarifying response.

In the future, I would recommend that Power section answer questions regarding plant capacity, etc since they are more aware of operational issues, outages, and other limitations.

Jody

-----Original Message-----

From: [REDACTED] NWD02
Sent: Thursday, April 28, 2011 1:26 PM
To: [REDACTED] NWO
Cc: Farhat, Jody S NWD02; [REDACTED] NWD02
Subject: Release Capacities at Mainstems (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED]
Got your voice mail. I assume you're speaking about Fort Peck, Garrison, and Oahe? We're already using the spillways at Fort Randall and Gavins.

Oahe: Rather than using the spillway, we use the outlet tunnels #1-#6. Tunnel capacity at max pool (1620') is 111,000 cfs. The spillway has never been used and provision for a conventional spillway chute and stilling basin has been deferred.

Garrison: Like Oahe, we use the outlet tunnels #6-#8. Capacity of these tunnels is about 100,000 cfs at max pool, which exceeds downstream channel capacity. Spillway discharge capacity at max pool (1854') is 660,000 cfs. An unlined pilot channel will erode and guide flows to the Missouri River in the event that spillway releases are required. To my knowledge that spillway has never been used.

Fort Peck: Unlike Oahe and Garrison, we cannot use the flood tunnels at Fort Peck and must use the spillway for total flows > power flows (max power flows are about 11,000 cfs). Discharge capacity at max pool (2250') is 230,000 cfs.

[REDACTED]
[REDACTED]
[REDACTED]
Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] F NWO

From: [REDACTED] NWD
Sent: Friday, April 29, 2011 3:14 PM
To: Farhat, Jody S NWD02
Cc: [REDACTED] NWD; [REDACTED] NWD
Subject: FW: National Flood Fight Talking Points -- 29 April (UNCLASSIFIED)
Attachments: 2011 flooding talking points - as of 1600 hrs, 29 Apr 11.docx

Jody

From the daily update FYSA

Patrick

Patrick A. Swan
Senior Public Affairs Officer
Northwestern Division, US Army Corps of Engineers

w 503 808 3710
patrick.a.swan@usace.army.mil
patrick.swan@us.army.mil

The first priority is making sure
that the first priority remains
the first priority.

-----Original Message-----

From: Harris, Scott D HQ02
Sent: Friday, April 29, 2011 1:12 PM
To: CDL-All-Public-Affairs-Division-Chiefs; CDL-All-Public-Affairs-District-Chiefs; Irwin, William E HQ02; [REDACTED] HQ02
Cc: [REDACTED] MVD; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02; [REDACTED] HQ02
Subject: National Flood Fight Talking Points -- 29 April (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

All:

Here are the talking points for Friday, April 29.

Vr,

Scott Harris
Public Affairs Specialist
Headquarters, U.S. Army Corps of Engineers
202-761-1806

Classification: UNCLASSIFIED
Caveats: NONE

Talking Points – April 2011 Flood Fighting Effort

(as of 1600 hrs, 29 April 2011)

GENERAL PROGRAM INFORMATION

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- We recognize that managing and communicating flood risk is a shared responsibility among federal, state, local, and private partners so individuals can make well informed public decisions about their safety.
- Public Law 84-99, Flood Control and Coastal Emergency Act, gives the Corps specific authorities to conduct preparedness, response, recovery, and rehabilitation activities.
- USACE provides disaster support to the nation: by our inherent Civil Works authorities for reservoir and dam / lock operations, Public Law 84-99 (Flood Control Act of 1941), by support to the Department of Homeland Security / Federal Emergency Management Agency, under the National Response Framework, and pursuant to the Stafford Act (Public Law 93-288), and support to the Department of Defense: domestic support to NORTHCOM and ARNORTH, overseas operations in Iraq and Afghanistan, and provision of field force engineering.
- In coordination with States, the Corps deploys flood fighting materials and supplies (sandbags, pumps, and expedient flood fight products), pre-positions flood flight supplies and equipment, and deploys flood engineers to provide technical assistance.

CURRENT FLOOD FIGHT

- Hundreds of engineers and technicians from the Mississippi Valley, Lakes and Rivers and Northwestern Divisions, along with scientists from the Corps' Engineer Research and Development Center, are working around the clock to combat flooding stemming from historic Mississippi River levels.
- The system is performing as designed, however, with the unprecedented level of river stages and huge pressures, some areas along the levee system are experiencing seepage. Engineers and local levee boards are fighting the seepage with sandbag ring levees and water berms to offset the tremendous pressure currently on the levee. Flood-fighting teams are closely monitoring and taking all necessary action to ensure the integrity of the system.
- Along with FEMA and our State and local partners, we are actively engaged in fighting the effects of spring flooding at Devils Lake, ND and along the Red, Souris, James, Mississippi, Missouri, Cumberland, Big Sioux, and Ohio Rivers and have spent, within our authorities, more than \$30 million of emergency funds for flood fighting materials and equipment, field investigations, monitoring levees, emergency contracting, and technical assistance.
- This is the third consecutive year where widespread and record flooding has occurred within the North Central United States.
- Currently, Corps water management officials are coordinating closely with state, local, private, and interagency partners along the Mississippi and Ohio Rivers to manage reservoirs and execute operations to reduce the risk of flooding to the greatest extent possible.
- The Mississippi River Commission, the Corps' Mississippi Valley Division, and the Corps' Memphis District are coordinating closely with other governmental agencies, communities and stakeholders to monitor conditions and execute prudent actions for potentially operating the Birds Point-New Madrid Floodway.
- As always, residents who live and work near flood-impacted levees should remain vigilant and must be prepared to follow directions from their local emergency management officials.

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Friday, April 29, 2011 1:43 PM
To: [REDACTED] NWK
Cc: Farhat, Jody S NWD02
Subject: RE: NWD Deviation Policy (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Yes. We track all deviations ... official request from NWO/NWK is done via memo and then we send back approval/denial signed memo. Depending on the urgency, we can do request/approval via email and follow up with memo.

Currently no deviations in place in NWK (other than 5-year Harlan County Interim Operating Plan) and 1 in place in NWO (Coldbrook).

BTW: I will be participating in the meeting via phone so I can speak to this topic. Jody is on the dam safety committee but she will be in KC with MRRIC.

[REDACTED]
[REDACTED]
Missouri River Basin Water Management,
Northwestern Division, USACE
402. [REDACTED]
402. [REDACTED] (fax)

-----Original Message-----
From: [REDACTED] NWK
Sent: Friday, April 29, 2011 1:07 PM
To: [REDACTED] NWD02
Subject: RE: NWD Deviation Policy (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Thanks for the reg. One more question (with 3 parts): Do you track all the deviation requests, how many are currently out there, and how many are typically done per year?

[REDACTED]
-----Original Message-----
From: [REDACTED] NWD02
Sent: Friday, April 29, 2011 11:50 AM
To: [REDACTED] NWK
Subject: NWD Deviation Policy (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

See attached.
[REDACTED]

[REDACTED]
[REDACTED]
Northwestern Division, USACE

403 [REDACTED]
403 [REDACTED] (fax)

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE

From: William Lay [wlay@socket.net]
Sent: Friday, April 29, 2011 5:41 PM
To: Farhat, Jody S NWD02
Subject: Reservoirs
Attachments: 2011 Reservoirs -A

Dear Jody,

My figures are probably way off and I have probably made a lot of mistakes but I am sending you my spreadsheet on the reservoir situation.

On April 29th it looks like we have filled up 88% of the system Annual Flood Control Pool. The lower reservoir, Oahe is almost completely filled and Garrison is about 74% filled, but the top reservoir, Fort Peck is only 54% filled. Shouldn't we be using the Fort Peck more? What if we all the reservoirs at at a nearly percentage level?

We may need a little extra room in those lower reservoirs if it should start raining.

I know what your answer is, but we got problems.

I don't need to tell you that.

Bill Lay

[REDACTED] NWO

From: Farhat, Jody S NWD02
Sent: Saturday, April 30, 2011 12:23 PM
To: [REDACTED] MVD
Cc: [REDACTED] NWD02
Subject: Re: Release Plan for Gavin's Point & Truman (UNCLASSIFIED)

Don - NWK plans to increase Truman releases from 0 to 21 kcfs on Monday. We have not determined an exact date to start increasing Gavins Point releases, but most likely would want to start coming up toward the end of next week, May 5 or 6. It was our intention to stay on this release until the peak at Cairo was firm and imminent.

Let me know if you have any questions.

Jody

Jody Farhat
Chief, Missouri River Water Management

----- Original Message -----

From: [REDACTED] NWD02
To: Farhat, Jody S NWD02
Sent: Sat Apr 30 07:35:55 2011
Subject: FW: Release Plan for Gavin's Point & Truman (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Did you want to answer this?

[REDACTED]
Reservoir Regulation Team Lead
Missouri River Basin Water Management,
Northwestern Division, USACE

[REDACTED]
[REDACTED] (fax)

-----Original Message-----

From: [REDACTED] MVD
Sent: Saturday, April 30, 2011 9:15 AM
To: [REDACTED] NWD02
Subject: Release Plan for Gavin's Point & Truman

[REDACTED]
Our CG asked us to work up a plan to see when we could begin normal releases from our lakes and I was wanting to add what your plans are for Gavin and Truman. Do you have something you can send me that states what you plan to release and when? To make sure I'm correct, we're assuming the releases from Gavin's has 14 day travel time to Cairo and Truman has a 7 day travel time, is this consistent with what you've assumed?

Thanks
[REDACTED]

Classification: UNCLASSIFIED

Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWD02
Sent: Saturday, April 30, 2011 9:36 AM
To: Farhat, Jody S NWD02
Subject: FW: Release Plan for Gavin's Point & Truman (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Did you want to answer this?

[REDACTED]
[REDACTED]
Missouri River Basin Water Management,
Northwestern Division, USACE
402 [REDACTED]
402 [REDACTED] (fax)

-----Original Message-----

From: [REDACTED] MVD
Sent: Saturday, April 30, 2011 9:15 AM
To: [REDACTED] NWD02
Subject: Release Plan for Gavin's Point & Truman

[REDACTED]
Our CG asked us to work up a plan to see when we could begin normal releases from our lakes and I was wanting to add what your plans are for Gavin and Truman. Do you have something you can send me that states what you plan to release and when? To make sure I'm correct, we're assuming the releases from Gavin's has 14 day travel time to Cairo and Truman has a 7 day travel time, is this consistent with what you've assumed?

Thanks
[REDACTED]

Classification: UNCLASSIFIED
Caveats: NONE

[REDACTED] NWO

From: [REDACTED] NWO
Sent: Saturday, April 30, 2011 8:00 AM
To: [REDACTED] NWK; Blechinger, Erik T NWO; [REDACTED] NWK; [REDACTED]
NWO; Farhat, Jody S NWD02
Subject: RE: Spring Rise Webinar ala drainage for the ISAP (UNCLASSIFIED)
Attachments: ATT90335.htm

Classification: UNCLASSIFIED
Caveats: NONE

Steve,
Joe Gibbs' original e-mail was attached as the "htm" file. I've also attached it here.

Thanks,

[REDACTED]
Office: 402-[REDACTED]
Mobile: 402-[REDACTED]

-----Original Message-----

From: [REDACTED] NWK
Sent: Friday, April 29, 2011 10:30 PM
To: Blechinger, Erik T NWO; [REDACTED] NWO; [REDACTED] NWK; [REDACTED] NWO;
Farhat, Jody S NWD02
Subject: RE: Spring Rise Webinar ala drainage for the ISAP (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Totally unprofessional comments from Tom Waters -- just blatant personal attacks (not only that, [REDACTED] is blamed and he was not even involved!!). Personally, they need a lesson in geography and H&H! Just curious, Erik, do you have the original note from Joe Gibbs?

-----Original Message-----

From: Blechinger, Erik T NWO
Sent: Friday, April 29, 2011 8:30 AM
To: [REDACTED] NWO; [REDACTED] NWK; [REDACTED] NWK; [REDACTED] NWO;
Farhat, Jody S NWD02
Subject: FW: Spring Rise Webinar ala drainage for the ISAP
Importance: High

Some feedback on yesterday's webinar.

-----Original Message-----

From: Tom & Karla Waters [<mailto:waters4@ix.netcom.com>]
Sent: Thursday, April 28, 2011 7:18 PM
To: McMahon, John R BG NWD; Anderson, G Witt NWD; Blechinger, Erik T NWO; Hofmann, Anthony J COL NWK; Ruch, Robert J COL NWO
Subject: Fwd: Spring Rise Webinar ala drainage for the ISAP
Importance: High

FYI
I thought you might like to see Joe's comments and take on the ISAP webinar and my response to him.
Frustration swells on the lower Missouri. There are alot of nervous folks down here right now.

Tom

Begin forwarded message:

From: Tom & Karla Waters <waters4@ix.netcom.com>

Date: April 28, 2011 7:05:16 PM CDT

To: Gibbs Joseph <JBG6267@aol.com>

Cc: Jackson Bill <bill@agriservices.com>

Subject: Re: Spring Rise Webinar ala drainage for the ISAP

Joe:

See the attached excerpt from the 8th Circuit Court of Appeals. Yes, the intended purpose of the Spring Rise is to cause man-made flooding! The authors of the BiOp want to connect the river to the floodplain. Plain and simple that is flooding. It remains the goal of people like [REDACTED] and [REDACTED] too.

I think it is the Corps that still needs to be educated about the Spring Rise, not the general public. I thought [REDACTED] retired and I thought [REDACTED] moved on to something different, but here they are briefing the ISAP. How frustrating! These guys have been part of the problem from the start! I guess if they keep pushing their agenda long and hard enough, people will believe them. To date it has been working and now they have the ear of the ISAP in a forum that does not allow for rebuttal from those impacted by their dangerous experiments.

There is no way around the fact that it takes 11 days for the water to travel from Gavins Point to St. Louis. The National Weather Service or Corps of Engineers still can not predict the weather 11 days out, so the rise still presents a possible threat. There is no way to know the spiking of the Spring Rise discharge allows sufficient time for gravity flow drainage. It all depends on the amount of water that needs to be drained and without accurate forecasting, how can they possibly know how long or short the spikes should be.

I continue to be appalled by the Corps' efforts to say the Spring Rise has no impacts on flood control. The potential is there every time they open the gates at Gavins Point. I suppose running 57,000cfs out of Gavins Point from now until December will also have no impact on flood control. Looks to me like we will have NO flood control this year.

Oahe is full and Fort Peck still has room. That is so backwards! It puts us in the same situation we were in last year. Lots of room left up north and everything full below. I asked Bill Lay why they don't fill the upper reservoirs first and save room in the lower reservoirs for the spring rainfall. The only answer he could come up with was "old habits never die". We talked about this last year, but we are again looking at problems this year. If the weather in southern Missouri moves 200 miles north, we will be in real trouble!

What ever happened to the Corps' mission? As far as I know, Congress has never changed there mission away from flood control and protecting people and property.

As you can tell, this just makes me angry!! That and the fact I haven't been able to get anything planted for a few weeks now.

But thanks for the update anyway. :-)

-Tom

Classification: UNCLASSIFIED
Caveats: NONE

Classification: UNCLASSIFIED
Caveats: NONE